

A large, stylized outline of the state of Illinois serves as a background for the title text. The text is centered within the outline.

1950

Illinois

Tests of

CORN

HYBRIDS

In Wide

Use

Bulletin
544

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Location of 1950 test fields



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ILLINOIS TESTS OF CORN HYBRIDS IN WIDE USE IN 1950

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THE ILLINOIS CORN CROP in 1950 was the smallest since 1947 and only 1 percent above the 1939-1948 ten-year average. Total production was estimated at 420 million bushels and average yield at 51 bushels an acre.² On the five test fields in northern and central Illinois the 1950 yields were 5 percent below those of 1949.

PLAN OF THE TESTS

Number of hybrids and their sources. Three hundred eleven hybrids were grown on seven regular test fields. Five single-cross and three double-cross hybrids were grown on two special test fields which differed in productivity. Fifty-four companies and individuals and the Illinois Station furnished seed for the tests (see pages 133-134).

Eighty-one hybrids were grown at Galesburg, Sheldon, Sullivan, and Brownstown. At the Dixon Springs Experiment Station 60 entries were planted on the bottomland field and 11 entries on the upland field. Seventy-five entries were tested at DeKalb and 60 at Mundelein (Table 1, page 104).

A representative of the Illinois Station or of the Illinois Crop Improvement Association collected seed for planting the test fields directly from the warehouses of the producers entering the corn. Seed of Illinois and U. S. hybrids in commercial production was obtained from the producers of these hybrids and also from the Illinois Seed Producers Association.³

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Table 1.—GENERAL INFORMATION: Illinois Cooperative
Hybrid Corn Tests, 1950

| Field, county, location, and number of entries | Date planted | Date harvested | Average acre- yield | Mois- ture in grain | Dam- aged corn | Erect Stand plants | Protein | Oil | |
|---|-----------------|-------------------|---------------------------|------------------------------|----------------------|--------------------------|---------------|---------------|-----|
| | | | <i>bu.</i> | <i>perct.</i> | <i>perct.</i> | <i>perct.</i> | <i>perct.</i> | <i>perct.</i> | |
| Mundelein: Lake NE 60..... | May 25 | Nov. 10 | 73.9 | 26.7 | 1.0 | 89 | 94 | 10.7 | 4.5 |
| DeKalb: DeKalb N 75..... | May 20 | Nov. 6-7 | 37.0 | 26.5 | .. | 97 | 90 | 9.7 | 3.9 |
| Galesburg: Knox WNC 81..... | May 23 | Nov. 8 | 92.8 | 21.2 | 2.3 | 95 | 81 | 9.8 | 4.7 |
| Sheldon: Iroquois ENC 81..... | May 24 | Oct. 20 | 89.7 | 23.4 | 1.1 | 90 | 95 | 9.4 | 4.6 |
| Sullivan: Moultrie SC 81..... | May 24 | Nov. 14 | 85.9 | 19.4 | 4.3 | 35 | 97 | 10.0 | 4.5 |
| Brownstown: Fayette S 81..... | May 26 | Nov. 15 | 81.3 | 21.3 | .9 | 60 | 88 | 10.1 | 4.7 |
| Dixon Springs: Pope Ex.8 | | | | | | | | | |
| Bottomland 60..... | May 26 | Nov. 21 | 28.8 | 19.8 | 3.2 | 79 | 87 | 9.3 | 4.1 |
| Upland 11..... | May 26 | Nov. 20 | 72.3 | 18.6 | 7.2 | 80 | 72 | 10.7 | 4.6 |

COOPERATORS: JAY and PARK ALLANSON, *Lake county*; RALPH HAWTHORNE and RALPH ANDERSON, *Knox county*; JOHN B. RICE, *Iroquois county*; R. B. VANDEVEER, Farm Manager, Illinois Masonic Home Farm, *Moultrie county*; DR. H. O. LEWIS and EARL SCHWARM, *Fayette county*. The Northern Illinois experiment field in DeKalb county is managed by the Illinois Station. The Pope county fields at Robbs are part of the Dixon Springs Experiment Station of which R. J. WEBB is superintendent.

Selection of entries. Each year seed corn producers are given an opportunity to nominate hybrids for testing on the various fields. For some fields the number of hybrids nominated is so great that they cannot all be tested. In order to enable the Station to choose among widely grown hybrids, farm advisers in the spring of 1950 were asked to make a survey of varieties popularly grown in each county. Selections were influenced by these reports.

A number of experimental hybrids that have shown promise for commercial production are also included in the tests. Other hybrids are grown to meet the field-performance requirement for certification. Generally six Station-produced, open-pedigree hybrids are included at each location. The 1950 performance of additional experimental hybrids is reported in Illinois Bulletin 543.

Soil characteristics of fields. The test fields are medium to high in productivity, and each represents a soil type common to the region where it is located. Each field was selected carefully for uniformity in soil type, productivity, and drainage. Approximate locations of test fields are shown in map on inside front cover. Information on soil characteristics and management is given in Table 2.

Field-plot design. A 9 x 9 randomized, lattice-square field-plot design with 5 replications was used on the Galesburg, Sheldon, Brownstown, and Sullivan fields. Controlled, randomized block designs were used at all other locations.

Method of planting. All test fields were planted by hand on land

Table 2. — TESTING FIELDS: Soil Characteristics
and Management Practices

| Soil type | Lime require- ment | Available phosphorus | Available potassium | Previous crops and soil management |
|--|--------------------------|-------------------------|------------------------|---|
| NORTHEASTERN: Mundelein | | | | |
| Black silt loam. | 2 | High | Medium | Oats 1947; red clover-alfalfa pasture 1948; soybeans 1949; rock phosphate applied in 1947; manured in 1950; 150 pounds of 3-12-12 applied in row at planting. |
| NORTHERN: DeKalb | | | | |
| Flanagan silt loam. | 3 | Low | High | Soybeans 1945; corn 1946; oats and mixed clovers 1947; winter wheat 1948-49. |
| WEST NORTH-CENTRAL: Galesburg | | | | |
| Muscatine silt loam. | 2 | High | Very high | Alfalfa hog pasture 1945; corn 1946, 1947; oats 1948; alfalfa hog pasture 1949; limestone applied several years ago and rock phosphate in 1948. |
| EAST NORTH-CENTRAL: Sheldon | | | | |
| Drummer silty clay loam. | 1 | High | Medium | Alfalfa pasture 1946-48; corn 1949; limed in 1937; rock phosphate in 1938; manured 1949; 125 pounds 3-9-18 applied in row at planting. |
| SOUTH-CENTRAL: Sullivan | | | | |
| Flanagan silt loam. | 0 | High | Very high | Alfalfa 1941-43; corn 1944; alfalfa-timothy pasture 1945-16; corn 1947, 1948; oats, sweet clover 1949; limestone applied 1946; rock phosphate 1949. |
| SOUTHERN: Brownstown | | | | |
| Cisne silt loam. | 0 | Medium | High | Waste land 1942-1946; soybeans 1947, 1948; wheat 1948-49; sweet clover 1949; 4 tons lime, 1000 pounds rock phosphate in 1947; 200 pounds 4-12-6 applied on wheat; 300 pounds muriate potash broadcast before corn; 200 pounds ammonium nitrate side-dressed at third cultivation. |
| EXTREME SOUTHERN: Robbs (Dixon Springs) | | | | |
| Upland field: Ava silt loam | 0 | Very low | Medium | Timothy-sweet clover sod 15 years prior to 1946; corn 1946; oats 1947; red clover 1948; wheat, sweet clover 1949. |
| Bottomland field: Bonnie silt loam. | 1 | Very low | High | Rye, sweet clover, lespedeza 1947; corn 1948, 1949. |

The soil type designations for DeKalb, Sullivan, and Brownstown fields have been approved by HERMAN WASCHER, Assistant Professor of Soil Physics. Type designations for the other fields were taken from published and unpublished Soil Survey records.

prepared in the regular way for corn. Each plot consisted of 2 rows 10 hills long. At Sullivan 5 kernels were planted to the hill and the hill thinned to 3 plants. Elsewhere 3 kernels were dropped in each hill except at Dixon Springs, where only 2 kernels were planted.

GROWING CONDITIONS

The 1950 growing season was rather unusual and not altogether favorable for corn. Though rainfall on all the fields was generally adequate, temperatures were well below normal during most of the season.

Cool weather delayed growth and ripening so much that there was some concern as to whether the crop would mature before frost. This threat did materialize in the northern tier of counties; the acreage damaged, however, represented only a small fraction of that planted.

All test fields were planted in excellent seedbeds between May 20 and 26. The stands at DeKalb, Sheldon, Mundelein, and Sullivan were good. Because of dry weather following planting and of cultivation mishaps, stands at Galesburg and Brownstown were variable.

Windstorms in late August caused severe root lodging at Sullivan and Brownstown. On the other fields there was little lodging, and that primarily stalk breakage, caused by stalk rots and corn borers. Frost on October 5 severely injured the crop on the DeKalb field and all hybrids were soft at harvest. Poor drainage and low fertility contributed to the late maturity of the crop on this field. Too much rain on the bottomland at Dixon Springs prevented proper plant growth and cultivation.

While summer temperatures were low, fall temperatures were unseasonably high. An extended period of bright, sunny weather in October allowed the bulk of the slow-maturing 1950 crop to dry well in the fields.

INSECT DAMAGE

European corn borer. During the 1950 season the European corn borer, *Pyrausta nubilalis* (Hbn.), caused much less damage to the corn crop than was anticipated at the beginning of the season. There are at least four reasons why damage was less than expected: (1) unfavorable weather; (2) more intensive use of sanitation practices; (3) greater conformity to planting-date recommendations; and (4) increased efforts at control with insecticides.

The most important of these reasons was unfavorable weather. Windy and stormy weather prevailed in late June and early July when moths were laying eggs for first-generation borers. Thus the weather cut down egg laying and beat many eggs off the corn plants.

In August, when first-generation worms were starting to pupate in preparation for the production of second-generation worms, the weather was similar to that of early fall. As a consequence only about 10 percent of the worms pupated, whereas usually 50 to 80 percent do.

The result is that the corn borer population that has gone into the winter is more nearly comparable to that of 1946 than of any other recent year. The existing situation is very fortunate. If farmers will follow the simple and well-tested practices long recommended for controlling this insect, its numbers can be held down. Otherwise an increase is likely.

Chinch bug. A fall survey of the abundance of the chinch bug, *Blissus leucopterus* (Say), indicates that if favorable weather conditions develop, chinch bug damage in 1951 is a possibility. Two parts of the state in particular are threatened: one the area included in a triangle formed by a line running east from Macon county to the Indiana line and northeast to Cook county; the second a small group of west-central counties along the Mississippi river. An increase in the chinch bug population depends on the rankness of small grain crops and dry weather during late spring.

DISEASE DAMAGE¹

Leaf blights. Stewart's disease, caused by *Bacterium stewarti*, occurred conspicuously as a leaf blight in many fields in the southern two-thirds of the state. In 1950 it was about as severe as in 1949.

Northern leaf blight, caused by the fungus *Helminthosporium turcicum*, was the worst ever recorded in Illinois. Leaf infections occurred in every field all over the state but were especially severe in the southern fourth of the state and in the two eastern tiers of counties as far north as Watseka.

There were striking differences among fields. In occasional fields all the leaves were killed by the end of August, while in neighboring fields, sometimes planted to the same hybrids, comparatively little damage occurred. There were also differences among hybrids in their resistance to both these leaf blights, as noted among single-cross hybrids grown in the same test plot.

¹ Data on disease prevalence and estimates of losses are based in part on surveys made by G. H. Boewe, Assistant Plant Pathologist, Illinois State Natural History Survey.



Two Helminthosporium blights. Southern leaf blight (A), caused by *H. maydis*, occurs occasionally in southern Illinois. Northern leaf blight (B, C), caused by *H. turcicum*, occurs in most years to some extent all over Illinois, but 1950 was the worst year on record.

Through the years, Stewart's disease has frequently occurred in the southern two-thirds of Illinois; damaging cases of northern leaf blight have been more rare. Northern leaf blight requires a protracted period of high humidity during the warm part of summer while the corn ears are still very immature. As the death of considerable areas of leaves from any cause predisposes the plants to stalk rots, both these leaf blights were partly to blame for the serious stalk rot conditions that developed in 1950.

Stalk rots. Damage from stalk rots, though above average, was about the same as in 1949. Losses occurred all over the state, but there were large differences between fields. As in 1949, the worst

damage took place in the southern half of the state and thus coincided with the heaviest prevalence of Stewart's disease and northern leaf blight.

The two fungi, *Diplodia zeae* and *Gibberella zeae*, were both very active, damage from the latter being the most pronounced since 1946. The premature death of plants from stalk rot was, on the average, caused principally by *Diplodia*. But the principal cause of broken stalks at harvest time was *Gibberella*. There were, however, great differences from place to place. As in 1949, a number of cases have

Table 3. — STALK ROT DAMAGE: Sheldon, 1950
(Premature death of corn plants: Chief cause *Diplodia*
and *Gibberella* stalk rots)

| Rank | Entry | Plants dead, Sept. 25 | Moisture in grain at harvest, Oct. 20 | Rank | Entry | Plants dead, Sept. 25 | Moisture in grain at harvest, Oct. 20 |
|------|-------------------------|-----------------------------|--|------|-------------------------|-----------------------------|--|
| | | perct. | perct. | | | perct. | perct. |
| 1 | Lowe 523 | 3.3 | 25.1 | 41 | Bear OK-31 | 12.0 | 21.0 |
| 2 | Crow 608 | 3.7 | 24.1 | 42 | Frey 645 | 12.1 | 23.5 |
| 3 | Kelly K-77 | 3.8 | 24.5 | 43 | Funk G-37 | 12.8 | 23.3 |
| 4 | Morton M-12 | 4.5 | 24.4 | 44 | Trisler T-19A | 13.0 | 22.7 |
| 5 | Ainsworth X-13-3 | 4.8 | 24.7 | 45 | DeKalb 800A | 13.7 | 24.8 |
| 6 | Holmes 39 | 6.1 | 24.0 | 46 | Illinois 1246 (Station) | 13.9 | 20.0 |
| 7 | DeKalb 666 | 6.4 | 23.2 | 47 | Crow "Deep Root" | 14.0 | 22.4 |
| 7 | Trisler T-33A | 6.4 | 25.1 | 48 | Crow 660 | 14.1 | 23.2 |
| 9 | DeKalb 847 | 6.7 | 23.7 | 48 | Farmercraft FC-81 | 14.1 | 22.0 |
| 9 | Stiegelmeier S-370 | 6.7 | 23.4 | 50 | Pfister 187 Hybrid 456 | 14.5 | 23.5 |
| 11 | National 115A | 6.8 | 22.9 | 51 | Super-Crost S-12 | 14.6 | 23.2 |
| 11 | Producers 730 | 6.8 | 24.1 | 52 | P.A.G. 347 | 14.7 | 21.9 |
| 13 | Funk G-95 | 6.9 | 25.8 | 53 | Super-Crost FD-6 | 15.1 | 23.5 |
| 14 | Illinois 1570 (Station) | 7.1 | 23.9 | 54 | Pfister 187 Hybrid 380 | 15.2 | 24.3 |
| 15 | Ainsworth X-21 | 7.3 | 22.0 | 55 | P.A.G. 164 | 15.8 | 24.3 |
| 15 | Producers 940 | 7.3 | 24.5 | 56 | Pioneer 300 | 16.0 | 24.2 |
| 17 | Appl 1766 | 7.5 | 23.2 | 57 | Frey 644 | 16.1 | 24.0 |
| 18 | Illinois 1421 (Station) | 7.6 | 23.2 | 58 | Pfister 187 Hybrid 1897 | 16.8 | 22.4 |
| 19 | Frey 692 | 7.7 | 21.2 | 59 | Pioneer 313B | 17.7 | 22.9 |
| 20 | Lowe 514 | 7.9 | 24.6 | 59 | DeKalb 817A | 17.7 | 24.2 |
| 20 | Super-Crost 840A | 7.9 | 24.3 | 61 | P.A.G. 170 | 18.0 | 21.8 |
| 22 | Illinois 21 (Station) | 8.4 | 23.2 | 62 | Funk G-77A | 18.9 | 22.6 |
| 23 | Holmes 13 | 8.6 | 24.7 | 63 | Frey 425 | 20.1 | 23.4 |
| 24 | Moews 520 | 8.7 | 24.0 | 64 | Pioneer 335 | 20.3 | 23.9 |
| 25 | Corn Belt 65A | 8.9 | 22.6 | 64 | Pfister 187 Hybrid 789 | 20.3 | 21.8 |
| 26 | Appl 1337 | 9.1 | 24.1 | 66 | Farmercraft FC-45 | 20.9 | 23.3 |
| 27 | Kelly K-374 | 9.5 | 21.6 | 67 | P.A.G. 392 | 22.5 | 20.6 |
| 28 | Super-Crost 746 | 9.9 | 23.4 | 68 | Trisler T-19 | 22.6 | 22.3 |
| 29 | Huey H-23 | 10.2 | 22.0 | 69 | Morton M-30 | 24.9 | 22.9 |
| 30 | Pioneer 304 | 10.3 | 26.0 | 70 | Doubet D-25 | 25.3 | 22.0 |
| 31 | U. S. 13 (Station) | 10.5 | 23.3 | 71 | Stiegelmeier S-340 | 25.8 | 20.8 |
| 32 | Producers 900 | 10.6 | 21.1 | 72 | Funk G-114 | 27.0 | 22.6 |
| 33 | Appl 136 | 10.8 | 24.0 | 73 | Moews 550 | 28.1 | 22.7 |
| 34 | National 118 | 11.1 | 22.9 | 74 | Bear OK-24 | 31.4 | 20.1 |
| 35 | Pioneer 332 | 11.3 | 25.8 | 75 | P.A.G. 4897 | 32.3 | 20.3 |
| 36 | Crow 633 | 11.5 | 23.3 | 76 | Funk G-16A | 39.7 | 23.0 |
| 36 | DeKalb 628A | 11.5 | 23.3 | 77 | Doubet D-3W | 45.8 | 22.0 |
| 38 | Crow 607 | 11.7 | 22.4 | 78 | Illinois 1558 (Station) | 46.9 | 23.3 |
| 39 | Schwenk S-34 | 11.8 | 24.4 | 79 | Moews 14 | 52.5 | 21.2 |
| 40 | Funk G-169 | 11.9 | 24.0 | | | | |

been noted, some on experimental plots, where heavy applications of fertilizers have markedly increased stalk rot and stalk breakage. In most of these cases nitrates had been applied on soil already in a good state of fertility and they had been either plowed under in seedbed preparation or side-dressed after the plants were up.

Additional data were obtained on resistance or susceptibility contributed by inbreds in single-cross tests. Inbreds not previously reported¹ that were outstandingly poor in both premature death from stalk rot and stalk breakage were B10, B35, R65, and W146.

Stalk rot data on commercial hybrids, as judged by premature death of plants, were obtained on the Sheldon field (Table 3). Entries were ranked according to the increasing prevalence of prematurely dead plants. Large differences are evident. The moisture content of the grain at harvest is also given as an index of the relative maturity of the hybrids.

An early hybrid is at a disadvantage compared with a later one because it reaches the stage of susceptibility to disease sooner. Thus the rot not only has a longer time in which to act but obtains its advantage early in the season when the weather is warm and the fungus grows rapidly. In general, the low-ranking hybrids in Table 3 showed the lowest moisture content. However, consideration must also be given the fact that as the plants died prematurely, the ears doubtless dried faster.

Ear rots. The average ear rot damage for all fields was 2.86 percent, the highest since 1944. Exceptionally high rot damage occurred on the Dixon Springs upland field, 7.24 percent (Table 4), and the striking thing there was that *Gibberella* rot was first in prevalence, with 3.39 percent of the kernels damaged. Hogs would probably refuse to eat corn having such a high percentage of *Gibberella* rot, but cattle would feed on it very well. For *Gibberella* ear rot the state average was the highest since 1926, but in that year occurred the highest ear rot damage of various kinds on record in University of Illinois tests.

In 1946 and 1950 *Gibberella* stalk rot was unusually prevalent. In those years *Gibberella* also ranked second in importance in ear rot damage. As an average for the state, however, *Gibberella* has never

¹ Koehler, Benjamin, and Jugenheimer, R. W. "Resistance of Corn Inbreds to Damage from *Diplodia* or *Gibberella* Stalk Rot, 1939-1949." Ill. Agr. Exp. Sta. Agronomy Mimeographed leaflet AG1431. 1950.

Table 4. — EAR ROT DAMAGE CAUSED BY FUNGI: Average of All Entries on Seven Test Fields, 1950

(Figures are based on laboratory tests)

| Rank | Fungi causing damage | Corn kernels damaged by rot | | | | | | | |
|------|--------------------------------|-----------------------------|----------------|---------|----------|-----------------|---------------|-----------------|---------|
| | | Munde- lein | Gales- burg | Sheldon | Sullivan | Browns- town | Dixon Springs | | Average |
| | | perct. | perct. | perct. | perct. | perct. | Upland | Bottom- land | perct. |
| 1 | <i>Diplodia zeae</i> | .15 | 1.40 | .94 | 2.28 | .32 | 1.88 | .15 | 1.02 |
| 2 | <i>Gibberella zeae</i> | .09 | .06 | .04 | .86 | .22 | 3.39 | .92 | .80 |
| 3 | <i>Fusarium moniliforme</i> | .27 | .15 | .08 | .66 | .26 | 1.72 | 1.53 | .67 |
| 4 | <i>Nigrospora oryzae</i> | .14 | .15 | .04 | .43 | .06 | .05 | .02 | .13 |
| 5 | <i>Penicillium</i> species.... | .16 | .26 | .01 | .03 | .02 | .10 | 0 | .08 |
| 6 | <i>Hormodendrum</i> species | .10 | .07 | .01 | 0 | 0 | .05 | .02 | .03 |
| | Miscellaneous..... | .07 | .20 | .01 | .03 | .04 | .05 | .52 | .13 |
| | Total..... | .98 | 2.29 | 1.13 | 4.29 | .92 | 7.24 | 3.16 | 2.86 |

been first as a cause of ear rot. Since 1924 at the Illinois Station, *Diplodia zeae* has ranked first ten times, *Fusarium moniliforme* ten times, and the two rated of about equal importance seven times.

Hybrids differ in susceptibility to ear rot as they do in many other characteristics. For data on ear rot damage to particular hybrids, see the three-year summaries in Tables 5 to 11.

Rust. Corn rust frequently causes some damage to sweet corn but ordinarily is of very minor importance in field corn. In 1950, however, it was the worst on record for field corn and caused appreciable damage.

MEASURING PERFORMANCE

The entries in the 1950 test are listed in the tables in the order of their total yields.

Yield of grain. To determine shelling percentage, all the ears from one replicate of each entry were shelled immediately after harvest. At Dixon Springs, however, because it was not practicable to shell all the ears in a replication, the shelling percentage of all entries was assumed to be 80 per cent. A sample of shelled corn was taken from the Dixon Springs plots by hand-shelling 8 ears of each entry in one replication.

From the well-mixed shelled corn one sample was taken to determine the percentage of moisture at harvest¹ and to determine the percentage of damaged kernels. The percentage of damaged corn was determined according to the federal grain standards.

The total acre-yield was calculated as shelled corn containing 15.5 per-

¹ All moisture determinations were made with a Steinlite moisture tester.

cent moisture, the upper limit allowable in No. 2 corn. The total yield thus obtained for four fields (Sullivan, Galesburg, Sheldon, and Brownstown) was adjusted according to the procedure outlined by Cochran for randomized lattice-square designs.¹

Erect plants. The percentage of erect plants in each plot of each entry on each field was estimated at the time of harvest. Lodging may have been due to rootworm damage, weak or rotted roots, corn borer damage, stalk rots, or weak stalks. Stalks broken above the ear were not considered lodged.

Height of ear. Notes on comparative height of ear were taken at harvest time. Each plot of each entry was placed in one of the five following categories: *low*, *mid-low* (midway between low and medium), *medium*, *mid-high* (midway between medium and high), and *high*. Beginning with *low* and continuing progressively to *high*, these terms were assigned numerical values from 1 to 5 to permit the averaging of the plots.

Stand. A count was made in late summer, at all fields, of the number of missing hills and total number of missing plants in each plot of each variety. Yields were corrected for missing hills by the following adjustment:

$$\text{Ear weight in field} \times \left(1 + \frac{\text{missing hills}}{\text{hills present}} \times .6 \right) =$$

adjusted ear weight.

The percent stand is based on the total number of missing plants in relation to the number that would have been present if all the kernels had produced plants. Stand differences may be due to poor germination, to disease, insect, or rodent destruction, or in some cases to destruction in cultivation. It is believed that because of the conditions under which these tests are run missing hills are generally the result of accidents in cultivation.

Oil and protein analysis. For the third year, a sample of each entry on each field was sent to the Northern Regional Research Laboratory at Peoria for an analysis of the oil and the protein content of the grain. These analyses were reported on a moisture-free basis.

Significance of yield differences. Too much confidence must not be placed in the particular ranking of a hybrid in the following tables, for chance has played a part in determining its position. Unaccountable variability in the soil and conditions on the field will cause differences in yield that are not inherent in the hybrids themselves.

The part played by chance in the 1950 tests has been calculated for total yield by the mathematical procedure known as "analysis of variance." In

¹ Cochran, W. G. "Some Additional Lattice-Square Designs." *Iowa Agr. Exp. Sta. Res. Bul. 318*. May, 1943.

each table is shown the approximate difference there must be between any two entries in order for them to show a true inherent difference. Unless two hybrids differ by at least this amount, there is no assurance that one hybrid is inherently higher yielding than the other.

RESULTS OF TESTS

Detailed results of the tests on seven regular test fields and the two special soil-adaptation fields are given in Tables 5 to 12 on the following pages. See also Table 4 on page 111 for ear-rot damage.

Readers are urged to keep in mind these two things when comparing the performance of hybrids on any one field:

1. Small differences in yield do not necessarily indicate the superiority of one hybrid over another. See each table for the amount one hybrid must exceed another before it can be considered better.

2. The summary section of each table is more reliable for evaluating those hybrids that have been tested for three years than is the single record for the current year. The fact that a hybrid does not appear in the summary is, however, nothing against it — its absence merely means that 1950 was the first year it was tested or that it missed one year of the series.

Table 5. — NORTHEASTERN ILLINOIS: Mundelein, 1950

| Rank | Entry | Total acre yield | Damaged corn in shelled sample | Moist- ure in grain at harvest | Erect plants | Stand | Height of ear | Protein | Oil |
|--|------------------------------|------------------------|---|---|-----------------|---------------|------------------|---------------|---------------|
| SUMMARY 1949-1950: Less than 7.0 bushels difference between total yields of any two entries is not significant. | | | | | | | | | |
| | | <i>bu.</i> | <i>perct.</i> | <i>perct.</i> | <i>perct.</i> | <i>perct.</i> | | <i>perct.</i> | <i>perct.</i> |
| 1 | Pioneer 352..... | 89.8 | 1.7 | 22.5 | 87 | 92 | Medium | 10.4 | 4.7 |
| 2 | Pioneer 349..... | 86.2 | 1.4 | 22.6 | 85 | 88 | Medium | 10.7 | 4.8 |
| 2 | Nichols 5B..... | 86.2 | 1.1 | 23.3 | 85 | 93 | Medium | 10.5 | 4.7 |
| 4 | Illinois 1180 (Huebsch)..... | 86.1 | 1.0 | 24.5 | 87 | 86 | Medium | 11.4 | 4.9 |
| 5 | Moews 87..... | 83.7 | 4.5 | 22.4 | 83 | 89 | Medium | 10.6 | 5.2 |
| 6 | Nichols 75..... | 83.2 | 1.6 | 24.6 | 85 | 91 | M-high | 10.9 | 4.7 |
| 7 | Ainsworth X-21..... | 82.2 | 2.2 | 30.8 | 85 | 90 | High | 10.9 | 4.4 |
| 8 | Nichols 99..... | 81.2 | .7 | 24.8 | 84 | 88 | M-high | 11.4 | 4.9 |
| 9 | DeKalb 239..... | 81.0 | .8 | 21.6 | 79 | 82 | Medium | 10.2 | 4.6 |
| 9 | Huebsch 44..... | 81.0 | 1.0 | 24.9 | 80 | 88 | M-high | 11.7 | 5.0 |
| 11 | Funk G-68..... | 80.3 | .5 | 21.9 | 80 | 89 | M-low | 10.2 | 5.2 |
| 12 | DeKalb 404A..... | 80.0 | .4 | 24.7 | 80 | 86 | Medium | 11.7 | 5.1 |
| 12 | Pioneer 377A..... | 80.0 | .8 | 19.4 | 79 | 87 | Medium | 11.0 | 4.8 |
| 14 | Producers 315..... | 79.8 | 1.6 | 24.9 | 83 | 84 | Medium | 11.1 | 5.0 |
| 15 | Producers 305..... | 79.6 | .6 | 23.7 | 81 | 88 | Medium | 11.3 | 4.8 |
| 16 | Illinois 101 (Huebsch)..... | 78.9 | 1.5 | 25.7 | 88 | 91 | Medium | 10.9 | 4.9 |
| 17 | DeKalb 410..... | 78.7 | .5 | 24.6 | 81 | 86 | Medium | 10.4 | 4.7 |
| 17 | Funk G-27..... | 78.7 | 2.6 | 25.3 | 85 | 90 | M-low | 10.8 | 5.0 |
| 19 | Ainsworth X-12..... | 78.6 | 1.0 | 29.2 | 86 | 89 | Medium | 9.9 | 4.2 |
| 20 | Producers 311..... | 78.1 | .9 | 24.0 | 83 | 88 | Medium | 11.0 | 4.8 |
| 21 | Ferris F-11..... | 77.8 | .4 | 24.6 | 87 | 86 | Medium | 10.9 | 4.9 |
| 22 | Nichols 202-A..... | 77.1 | 1.1 | 25.0 | 84 | 86 | Medium | 11.2 | 4.8 |
| 23 | Super-Crost 213..... | 77.0 | .6 | 21.9 | 75 | 88 | Medium | 11.0 | 5.0 |
| 24 | DeKalb 406..... | 76.8 | 1.9 | 25.1 | 81 | 85 | Medium | 11.4 | 4.7 |
| 25 | P.A.G. 61..... | 76.0 | .5 | 21.6 | 83 | 84 | Medium | 10.9 | 4.6 |
| 26 | P.A.G. 56..... | 74.7 | .8 | 21.1 | 71 | 87 | Medium | 11.1 | 4.7 |
| 27 | Super-Crost 85A..... | 73.4 | .6 | 19.9 | 66 | 88 | Low | 10.9 | 4.9 |
| 28 | Producers 320..... | 71.4 | 1.2 | 27.9 | 86 | 88 | Medium | 11.0 | 4.7 |
| | Average of all entries..... | 79.9 | 1.2 | 24.0 | 82 | 88 | ..... | 10.9 | 4.8 |

1950 RESULTS: Less than 4.4 bushels difference between
total yields of any two entries is not significant.

| | | | | | | | | | |
|----|------------------------------|------|-----|------|----|----|--------|------|-----|
| 1 | Lowe 32..... | 90.0 | .2 | 20.5 | 90 | 98 | M-high | 10.9 | 5.0 |
| 2 | Pioneer 352..... | 85.8 | .4 | 25.1 | 95 | 94 | Medium | 9.7 | 4.4 |
| 3 | Pioneer 347..... | 82.7 | .5 | 26.9 | 90 | 97 | Medium | 10.4 | 4.7 |
| 4 | Bear OK-224..... | 80.5 | .5 | 25.0 | 77 | 96 | Medium | 10.6 | 4.6 |
| 5 | Illinois 1277 (Station)..... | 80.3 | 1.0 | 28.4 | 85 | 96 | Medium | 10.2 | 4.5 |
| 6 | Pioneer 346..... | 79.6 | .5 | 29.7 | 94 | 95 | M-high | 10.3 | 4.1 |
| 7 | Huebsch 81..... | 79.5 | 1.5 | 27.5 | 90 | 96 | Medium | 11.0 | 4.6 |
| 8 | Keystone 32..... | 79.4 | .4 | 25.0 | 86 | 94 | Medium | 10.7 | 4.6 |
| 9 | Moews 87..... | 79.1 | 6.8 | 24.1 | 87 | 93 | M-low | 10.9 | 5.3 |
| 10 | Producers 315..... | 78.8 | .3 | 26.6 | 91 | 96 | Medium | 11.2 | 4.8 |
| 11 | National 112..... | 78.5 | .6 | 22.1 | 84 | 97 | Medium | 10.9 | 4.4 |
| 12 | DeKalb 406..... | 78.4 | 1.1 | 28.4 | 90 | 94 | Medium | 10.4 | 4.4 |
| 13 | Nichols 5B..... | 78.3 | 1.6 | 23.5 | 87 | 96 | Medium | 10.4 | 4.3 |
| 14 | Pioneer 349..... | 77.8 | .6 | 23.1 | 93 | 96 | Medium | 10.5 | 4.6 |
| 15 | Funk G-68..... | 77.6 | .4 | 23.2 | 93 | 95 | M-low | 9.9 | 5.0 |
| 16 | DeKalb 404A..... | 77.0 | .3 | 26.6 | 90 | 94 | M-high | 11.0 | 4.8 |
| 17 | DeKalb 239..... | 76.5 | .5 | 22.0 | 88 | 93 | Medium | 10.2 | 4.3 |
| 18 | Crow 432..... | 76.2 | .1 | 25.4 | 91 | 94 | Medium | 10.6 | 4.6 |
| 19 | Producers 305..... | 74.9 | .4 | 24.5 | 90 | 94 | Medium | 11.0 | 4.5 |
| 20 | Super-Crost 213..... | 74.8 | .5 | 23.2 | 83 | 94 | Medium | 10.9 | 4.9 |
| 21 | Huebsch 24A..... | 74.7 | 2.4 | 24.4 | 85 | 94 | M-low | 10.8 | 4.7 |
| 22 | Producers 311..... | 74.6 | 1.4 | 25.3 | 93 | 93 | M-high | 10.8 | 4.5 |
| 23 | Lowe 52..... | 74.5 | .1 | 29.7 | 93 | 96 | Medium | 9.9 | 4.4 |
| 24 | Illinois 101 (Huebsch)..... | 74.4 | .8 | 28.7 | 92 | 95 | Medium | 10.6 | 4.6 |
| 24 | Illinois 1493 (Station)..... | 74.4 | .0 | 31.4 | 95 | 96 | M-high | 10.8 | 4.2 |
| 26 | Nichols 51..... | 74.3 | .6 | 24.1 | 88 | 94 | M-low | 10.2 | 4.8 |
| 26 | Huebsch 44..... | 74.3 | .5 | 27.6 | 86 | 96 | Medium | 11.7 | 4.9 |

(Table is concluded on next page)

Table 5. — NORTHEASTERN ILLINOIS: Mundelein, 1950 — concluded

| Rank | Entry | Total acre yield | Damaged corn in shelled sample | Mois- ture in grain at harvest | Erect plants | Stand | Height of ear | Protein | Oil |
|--------------------------|------------------------------|------------------------|---|---|-----------------|---------------|------------------|---------------|---------------|
| 1950 RESULTS — concluded | | | | | | | | | |
| | | <i>bu.</i> | <i>perct.</i> | <i>perct.</i> | <i>perct.</i> | <i>perct.</i> | | <i>perct.</i> | <i>perct.</i> |
| 28 | Nichols 75..... | 74.1 | .5 | 25.1 | 87 | 95 | Medium | 11.4 | 4.5 |
| 29 | Illinois 1279 (Station)..... | 73.5 | 1.6 | 29.5 | 90 | 95 | Medium | 11.2 | 4.6 |
| 30 | Ferris F-11..... | 73.4 | .4 | 27.6 | 93 | 94 | Medium | 10.6 | 4.7 |
| 31 | Ainsworth X-12..... | 73.0 | .8 | 34.6 | 94 | 91 | Medium | 9.9 | 4.0 |
| 32 | Illinois 1280 (Station)..... | 72.8 | .3 | 29.3 | 91 | 93 | Medium | 10.1 | 4.6 |
| 33 | P. A. G. 4897..... | 72.5 | .9 | 30.6 | 91 | 96 | High | 9.9 | 3.9 |
| 34 | Pioneer 377A..... | 72.4 | 1.0 | 20.2 | 93 | 86 | Medium | 11.3 | 4.7 |
| 34 | P. A. G. 61..... | 72.4 | .3 | 22.4 | 85 | 90 | M-high | 10.6 | 4.4 |
| 34 | Bear OK-116..... | 72.4 | .3 | 23.6 | 82 | 94 | M-low | 9.9 | 4.6 |
| 34 | Corn Belt 25A..... | 72.4 | .2 | 26.2 | 93 | 93 | Medium | 11.6 | 4.5 |
| 38 | Ainsworth X-21..... | 72.3 | .5 | 36.8 | 90 | 94 | High | 10.8 | 4.4 |
| 39 | Nichols 202A..... | 72.2 | 1.3 | 27.5 | 89 | 90 | Medium | 11.1 | 4.6 |
| 40 | Doubet D-3W..... | 72.1 | 1.6 | 33.6 | 92 | 94 | M-high | 10.2 | 4.4 |
| 41 | Stiegelmeier S-9H..... | 72.0 | 5.0 | 30.9 | 91 | 93 | Medium | 10.7 | 4.4 |
| 41 | Moews 14E..... | 72.0 | 6.2 | 26.9 | 88 | 93 | Medium | 10.5 | 4.3 |
| 43 | Illinois 1180 (Huebsch)..... | 71.7 | .9 | 26.6 | 90 | 92 | Medium | 11.6 | 4.7 |
| 44 | United U-32A..... | 71.2 | .4 | 23.1 | 93 | 95 | Medium | 10.9 | 4.4 |
| 45 | Lowe 38..... | 70.7 | .3 | 23.1 | 87 | 96 | Medium | 10.6 | 5.1 |
| 45 | Funk G-30..... | 70.7 | .7 | 27.2 | 91 | 93 | Low | 10.2 | 4.6 |
| 47 | Funk G-29..... | 70.5 | 2.3 | 33.6 | 93 | 92 | M-low | 10.0 | 3.9 |
| 48 | Crow 260..... | 70.2 | .5 | 25.9 | 89 | 93 | Medium | 10.1 | 4.8 |
| 49 | Funk G-16A..... | 70.1 | .7 | 32.4 | 91 | 96 | M-high | 10.4 | 4.1 |
| 50 | DeKalb 410..... | 69.9 | .2 | 27.3 | 86 | 94 | Medium | 10.6 | 4.3 |
| 51 | Furr 70..... | 69.5 | .3 | 31.6 | 92 | 91 | Medium | 10.5 | 4.2 |
| 52 | Iowaleth 4A..... | 69.3 | .2 | 21.3 | 86 | 93 | Medium | 10.8 | 4.4 |
| 53 | Furr 67A..... | 69.2 | 1.3 | 29.3 | 93 | 89 | M-high | 10.6 | 4.1 |
| 54 | Super-Crost F-112A..... | 68.5 | 1.4 | 21.4 | 88 | 90 | M-high | 10.8 | 4.4 |
| 55 | P. A. G. 56..... | 67.0 | .8 | 20.8 | 73 | 91 | Medium | 10.8 | 4.4 |
| 56 | Funk G-27..... | 66.4 | .5 | 28.6 | 91 | 92 | M-low | 10.2 | 5.0 |
| 57 | Doubet D-25..... | 65.9 | .3 | 36.8 | 91 | 94 | M-high | 11.8 | 4.6 |
| 58 | Nichols 99..... | 65.4 | .7 | 26.6 | 88 | 89 | Medium | 11.7 | 4.7 |
| 59 | Producers 320..... | 64.8 | 2.0 | 31.8 | 91 | 94 | M-high | 11.1 | 4.5 |
| 60 | Super-Crost 85A..... | 63.9 | .5 | 19.6 | 81 | 93 | M-low | 10.6 | 4.7 |
| | Average of all entries..... | 73.9 | 1.0 | 26.7 | 89 | 94 | ..... | 10.7 | 4.5 |

Table 6. — NORTHERN ILLINOIS: DeKalb

| Rank | Entry | Total acre yield | Damaged corn in shelled sample ^a | Mois- ture in grain at harvest | Erect plants | Stand | Height of ear | Protein | Oil |
|--|-------------------------------|------------------------|--|---|-----------------|---------------|------------------|---------------|---------------|
| SUMMARY 1948-1950: Less than 4.8 bushels difference between total yields of any two entries is not significant. | | | | | | | | | |
| | | <i>bu.</i> | <i>perct.</i> | <i>perct.</i> | <i>perct.</i> | <i>perct.</i> | | <i>perct.</i> | <i>perct.</i> |
| 1 | P.A.G. 253..... | 60.0 | 2.0 | 22.7 | 96 | .. | M-low | 9.3 | 4.5 |
| 2 | Sieben S-340..... | 59.2 | 1.0 | 25.3 | 97 | .. | M-high | 8.9 | 3.9 |
| 3 ^b | Illinois 751..... | 58.4 | 1.6 | 24.8 | 95 | .. | Medium | 9.9 | 3.9 |
| 4 | Pioneer 349..... | 57.5 | .9 | 23.5 | 95 | .. | Low | 9.2 | 4.3 |
| 5 | P.A.G. 299..... | 57.3 | 3.1 | 24.0 | 96 | .. | M-low | 9.0 | 4.4 |
| 5 | Lowe 52..... | 57.3 | 4.9 | 23.8 | 97 | .. | Low | 8.7 | 4.5 |
| 7 | Illinois 1091A (Station)..... | 57.2 | 2.4 | 25.6 | 96 | .. | Medium | 9.1 | 4.3 |
| 8 | Holmes 11..... | 56.9 | 1.0 | 25.6 | 95 | .. | Medium | 9.4 | 4.5 |
| 9 | Illinois 101 (Station)..... | 56.7 | 1.3 | 25.3 | 96 | .. | M-low | 9.4 | 4.5 |
| 10 | Nichols 75..... | 56.1 | 2.4 | 24.9 | 96 | .. | M-low | 8.7 | 4.5 |
| 11 | Frey 410..... | 55.9 | .6 | 22.4 | 95 | .. | M-low | 10.0 | 4.5 |
| 12 | Sieben S-440E..... | 55.6 | .5 | 26.3 | 95 | .. | M-low | 9.7 | 4.4 |
| 13 | Crow 407..... | 55.4 | 1.6 | 25.0 | 96 | .. | Medium | 9.5 | 4.6 |
| 14 | National 114-1..... | 54.4 | .6 | 23.7 | 97 | .. | M-low | 9.9 | 4.2 |
| 15 | Keystone 33..... | 53.3 | 1.1 | 24.7 | 96 | .. | M-low | 9.7 | 4.1 |
| 16 | Ferris F-11..... | 52.4 | .8 | 23.8 | 96 | .. | M-low | 10.1 | 4.5 |
| 17 | Moews 14..... | 52.2 | 1.0 | 26.1 | 95 | .. | M-low | 9.6 | 4.1 |
| 18 | Crow 360..... | 51.5 | .3 | 25.4 | 94 | .. | M-high | 9.3 | 4.2 |
| 19 | Lowe 32..... | 50.7 | .6 | 20.9 | 96 | .. | Medium | 9.2 | 4.1 |
| | Average of all varieties..... | 55.7 | 1.5 | 24.3 | 96 | .. | M-low | 9.4 | 4.3 |

1950 RESULTS: Less than 7.9 bushels difference between
total yields of any two entries is not significant.

| | | | | | | | | | |
|----|-------------------------------|------|-----|------|----|----|--------|------|-----|
| 1 | Lowe 22..... | 48.5 | ... | 36.1 | 98 | 95 | High | 9.1 | 3.1 |
| 2 | Pioneer 347..... | 45.1 | ... | 25.8 | 98 | 92 | Medium | 7.9 | 4.1 |
| 3 | Holmes 11A..... | 44.2 | ... | 23.6 | 98 | 95 | Medium | 10.1 | 4.0 |
| 4 | Illinois 751 (Joslin)..... | 44.0 | ... | 29.3 | 98 | 94 | M-high | 9.3 | 3.6 |
| 5 | Bear OK-411..... | 43.5 | ... | 25.1 | 95 | 96 | Low | 9.6 | 4.2 |
| 5 | Keystone 32..... | 43.5 | ... | 22.7 | 98 | 92 | Medium | 8.6 | 4.0 |
| 7 | Pioneer 346..... | 43.3 | ... | 26.3 | 96 | 95 | Medium | 9.1 | 3.5 |
| 8 | Nichols 5B..... | 43.2 | ... | 21.8 | 95 | 87 | Medium | 10.4 | 4.0 |
| 9 | Pioneer 349..... | 41.6 | ... | 22.9 | 97 | 85 | Low | 9.1 | 4.0 |
| 10 | Frey 425..... | 41.5 | ... | 28.9 | 98 | 92 | M-high | 9.3 | 3.9 |
| 11 | Ferris F-14..... | 40.9 | ... | 26.1 | 98 | 89 | Medium | 8.8 | 4.0 |
| 12 | Illinois 1558 (Station)..... | 40.7 | ... | 23.5 | 98 | 93 | Low | 8.7 | 3.9 |
| 13 | National 114-1..... | 40.6 | ... | 25.1 | 97 | 90 | M-low | 9.6 | 3.7 |
| 14 | Munson M-5..... | 40.1 | ... | 27.1 | 98 | 90 | Medium | 9.8 | 3.8 |
| 14 | Pioneer 350..... | 40.1 | ... | 29.0 | 96 | 93 | Medium | 10.5 | 3.6 |
| 16 | Tiemann 61..... | 39.6 | ... | 27.8 | 96 | 95 | M-high | 9.6 | 3.7 |
| 17 | Corn Belt 46A..... | 39.4 | ... | 21.6 | 97 | 86 | M-low | 9.5 | 4.1 |
| 17 | Illinois 1277 (Station)..... | 39.4 | ... | 28.4 | 96 | 93 | M-low | 9.2 | 3.9 |
| 19 | Funk G-16A..... | 39.3 | ... | 27.5 | 97 | 89 | Medium | 9.6 | 3.9 |
| 20 | Crow 407..... | 39.1 | ... | 27.3 | 97 | 86 | Medium | 10.3 | 3.9 |
| 21 | Iowea 16A..... | 39.0 | ... | 22.8 | 95 | 89 | Medium | 9.3 | 4.2 |
| 22 | Illinois 1091A (Station)..... | 38.9 | ... | 26.8 | 96 | 91 | M-high | 9.6 | 4.1 |
| 23 | P.A.G. 4897..... | 38.8 | ... | 26.9 | 97 | 96 | M-high | 9.3 | 3.5 |
| 23 | Producers 510..... | 38.8 | ... | 29.9 | 98 | 87 | Medium | 10.4 | 3.5 |
| 25 | Joslin J-102..... | 38.7 | ... | 29.0 | 98 | 93 | Medium | 9.8 | 4.1 |
| 26 | Furr 67A..... | 38.2 | ... | 25.1 | 97 | 89 | Medium | 9.6 | 3.9 |
| 27 | Sieben S-340..... | 38.1 | ... | 27.0 | 97 | 87 | M-high | 9.5 | 3.3 |
| 27 | Sieben S-560..... | 38.1 | ... | 28.3 | 98 | 93 | Medium | 9.5 | 4.2 |
| 29 | P.A.G. 2675..... | 37.6 | ... | 22.4 | 98 | 95 | M-low | 8.9 | 3.0 |
| 30 | DeKalb 406..... | 37.4 | ... | 22.6 | 98 | 88 | Medium | 9.1 | 4.2 |
| 31 | Ferris F-12..... | 37.3 | ... | 28.8 | 97 | 91 | Medium | 9.3 | 3.9 |
| 32 | Nichols 5A..... | 37.2 | ... | 29.3 | 98 | 93 | Medium | 10.0 | 3.9 |
| 33 | Lowe 32..... | 37.1 | ... | 19.9 | 97 | 94 | M-low | 9.2 | 4.3 |
| 33 | Lowe 52..... | 37.1 | ... | 22.0 | 96 | 91 | Low | 8.8 | 3.9 |
| 35 | Producers E360..... | 36.9 | ... | 26.0 | 98 | 95 | Medium | 9.2 | 4.1 |

(Table is concluded on next page)

Table 6. — NORTHERN ILLINOIS: DeKalb — concluded

| Rank | Entry | Total acre yield | Damaged corn in shelled sample ^a | Mois- ture in grain at harvest | Erect plants | Stand | Height of ear | Protein | Oil |
|--------------------------|------------------------------|------------------------|--|---|-----------------|---------------|------------------|---------------|---------------|
| 1950 RESULTS — concluded | | | | | | | | | |
| | | <i>bu.</i> | <i>perct.</i> | <i>perct.</i> | <i>perct.</i> | <i>perct.</i> | | <i>perct.</i> | <i>perct.</i> |
| 35 | Stiegelmeier S-360..... | 36.9 | ... | 31.1 | 98 | 94 | Medium | 9.9 | 3.9 |
| 37 | Pioneer 352..... | 36.8 | ... | 25.4 | 97 | 94 | M-low | 9.1 | 3.8 |
| 38 | DeKalb 245..... | 36.6 | ... | 22.0 | 96 | 90 | Medium | 9.4 | 3.6 |
| 38 | Super-Crost 213..... | 36.6 | ... | 25.0 | 97 | 87 | M-low | 9.6 | 3.8 |
| 40 | DeKalb 459..... | 36.5 | ... | 30.3 | 98 | 91 | Medium | 8.7 | 3.9 |
| 41 | Funk G-77A..... | 36.4 | ... | 24.7 | 98 | 86 | M-high | 10.1 | 3.8 |
| 41 | P.A.G. 253..... | 36.4 | ... | 25.0 | 97 | 89 | M-low | 9.9 | 4.3 |
| 43 | Frey 410..... | 36.3 | ... | 22.1 | 97 | 86 | Low | 10.1 | 4.1 |
| 44 | Ainsworth X-21..... | 36.2 | ... | 32.7 | 96 | 90 | M-high | 10.8 | 3.8 |
| 44 | Illinois 101 (Station)..... | 36.2 | ... | 28.3 | 96 | 91 | M-low | 9.8 | 4.1 |
| 44 | P.A.G. 299..... | 36.2 | ... | 25.8 | 97 | 86 | M-low | 9.1 | 3.9 |
| 44 | Producers 311..... | 36.2 | ... | 22.1 | 97 | 89 | M-low | 9.2 | 4.2 |
| 48 | Nichols 75..... | 35.9 | ... | 23.1 | 96 | 90 | Low | 8.8 | 4.1 |
| 49 | P.A.G. 270..... | 35.8 | ... | 30.8 | 98 | 91 | Medium | 9.5 | 3.3 |
| 50 | Crow 260..... | 35.0 | ... | 23.8 | 96 | 90 | Low | 9.9 | 4.1 |
| 50 | Funk 70045A..... | 35.0 | ... | 31.2 | 97 | 85 | M-high | 10.2 | 3.4 |
| 52 | Funk G-29..... | 34.9 | ... | 33.1 | 96 | 81 | Low | 10.4 | 3.2 |
| 53 | DeKalb 410..... | 34.7 | ... | 23.6 | 98 | 83 | Low | 9.3 | 4.0 |
| 53 | Super-Crost FD-3B..... | 34.7 | ... | 22.1 | 98 | 85 | M-low | 9.8 | 4.0 |
| 55 | United U-32A..... | 34.6 | ... | 23.9 | 97 | 91 | Low | 9.8 | 3.7 |
| 56 | Crow 360..... | 34.4 | ... | 26.1 | 98 | 90 | M-high | 9.8 | 4.0 |
| 56 | Ferris F-11..... | 34.4 | ... | 25.0 | 96 | 90 | M-low | 10.2 | 4.3 |
| 56 | Illinois 1279 (Station)..... | 34.4 | ... | 26.8 | 99 | 91 | Medium | 11.2 | 4.0 |
| 56 | Illinois 1493 (Station)..... | 34.4 | ... | 27.6 | 97 | 93 | Medium | 9.2 | 3.5 |
| 56 | Moews 15..... | 34.4 | ... | 26.0 | 98 | 88 | M-low | 10.1 | 3.8 |
| 61 | Sieben S-440E..... | 34.1 | ... | 32.2 | 94 | 86 | M-low | 10.2 | 3.7 |
| 61 | Ainsworth X-12..... | 34.1 | ... | 30.2 | 95 | 93 | M-low | 9.2 | 3.3 |
| 63 | Doubet D-1..... | 33.8 | ... | 28.8 | 97 | 85 | M-low | 10.0 | 3.7 |
| 64 | Moews 14..... | 32.8 | ... | 32.1 | 96 | 88 | M-low | 9.7 | 3.5 |
| 64 | DeKalb 458..... | 32.8 | ... | 29.0 | 97 | 91 | Medium | 9.5 | 4.1 |
| 66 | Doubet D-25..... | 32.7 | ... | 29.8 | 97 | 90 | M-high | 11.2 | 3.9 |
| 66 | Lowe 38..... | 32.7 | ... | 19.3 | 96 | 88 | Low | 10.1 | 4.8 |
| 68 | Crow 432..... | 32.1 | ... | 27.2 | 94 | 89 | M-low | 9.6 | 4.1 |
| 69 | Holmes 11..... | 31.6 | ... | 28.3 | 96 | 88 | Medium | 9.8 | 4.0 |
| 70 | Nichols 99..... | 31.3 | ... | 23.1 | 96 | 79 | M-low | 10.7 | 4.3 |
| 71 | Sieben S-450..... | 31.1 | ... | 26.7 | 99 | 85 | Medium | 9.6 | 3.8 |
| 72 | Bear OK-414..... | 30.9 | ... | 28.0 | 94 | 94 | Medium | 9.4 | 4.1 |
| 73 | Funk G-37..... | 30.5 | ... | 30.1 | 98 | 92 | High | 9.9 | 3.9 |
| 74 | DeKalb 404A..... | 28.5 | ... | 29.0 | 96 | 92 | M-low | 11.6 | 3.8 |
| 75 | Keystone 33..... | 27.0 | ... | 25.6 | 95 | 89 | Low | 10.9 | 3.8 |
| | Average of all entries..... | 37.0 | ... | 26.5 | 97 | 90 | ..... | 9.7 | 3.9 |

^a Two-year average 1948, 1949. Because the corn was soft at harvest and subsequently incurred injury during shelling, damage was not determined in 1950. ^b Average of Illinois 751 (Station) 1948, 1949, and Illinois 751 (Joslin) 1950.

Table 7. — WEST NORTH-CENTRAL ILLINOIS: Galesburg

| Rank | Entry | Total acre yield | Damaged corn in shelled sample | Moisture in grain at harvest | Erect plants | Stand | Height of ear | Protein | Oil |
|--|-------------------------------|------------------------|---|------------------------------------|-----------------|---------------|------------------|---------------|---------------|
| SUMMARY 1948-1950: Less than 5.4 bushels difference between total yields of any two entries is not significant. | | | | | | | | | |
| | | <i>bu.</i> | <i>perct.</i> | <i>perct.</i> | <i>perct.</i> | <i>perct.</i> | | <i>perct.</i> | <i>perct.</i> |
| 1 | Schwenk S-24..... | 106.3 | 2.9 | 22.0 | 83 | .. | High | 9.9 | 4.6 |
| 2 | Pioneer 313B..... | 106.0 | 4.7 | 23.6 | 73 | .. | M-high | 9.8 | 4.9 |
| 3 | Illinois 21 (Station)..... | 105.0 | 4.3 | 21.5 | 85 | .. | M-high | 9.8 | 4.7 |
| 4 | P.A.G. 170..... | 104.3 | 1.1 | 21.2 | 80 | .. | M-high | 9.6 | 4.4 |
| 5 | Ainsworth X-21..... | 103.6 | 3.3 | 21.7 | 83 | .. | M-high | 10.4 | 5.0 |
| 6 | Ainsworth X-13-3..... | 103.1 | 3.3 | 21.3 | 79 | .. | High | 10.4 | 4.8 |
| 7 | Lowealth AQ..... | 102.1 | 2.6 | 19.7 | 82 | .. | Medium | 10.5 | 4.8 |
| 8 | Lowe 520..... | 101.2 | 2.2 | 23.3 | 79 | .. | M-high | 10.0 | 4.9 |
| 9 ^a | U.S. 13..... | 101.0 | 2.7 | 22.1 | 81 | .. | High | 9.9 | 4.7 |
| 10 | Morton M-12..... | 100.7 | 3.4 | 21.2 | 82 | .. | M-high | 10.6 | 4.8 |
| 11 | Producers 900..... | 100.4 | 2.7 | 22.2 | 81 | .. | M-high | 10.2 | 5.1 |
| 12 | Lowe 514..... | 99.9 | 1.7 | 21.7 | 80 | .. | M-high | 9.9 | 4.7 |
| 13 | P.A.G. 392..... | 99.2 | 3.0 | 20.4 | 83 | .. | Medium | 10.1 | 4.7 |
| 14 | Producers 940..... | 97.9 | 3.1 | 21.8 | 83 | .. | High | 10.5 | 4.7 |
| 15 | Sieben S-340..... | 97.7 | 1.1 | 20.8 | 81 | .. | Medium | 10.3 | 4.5 |
| 16 | Doubet D-3W..... | 96.7 | 2.4 | 20.7 | 81 | .. | Medium | 9.8 | 4.9 |
| 17 | Sieben S-440..... | 96.0 | .9 | 19.4 | 78 | .. | M-low | 10.1 | 4.7 |
| 18 | National 125-1..... | 95.9 | 1.8 | 21.1 | 85 | .. | Medium | 10.9 | 5.0 |
| 19 | Pioneer 336..... | 95.8 | 3.5 | 20.8 | 80 | .. | High | 11.1 | 5.1 |
| 20 | Funk G-37..... | 94.2 | 1.6 | 20.7 | 86 | .. | M-high | 10.6 | 5.0 |
| | Average of all entries..... | 100.4 | 2.6 | 21.4 | 81 | .. | ..... | 10.2 | 4.8 |
| 1950 RESULTS: Less than 9.5 bushels difference between total yields of any two entries is not significant. | | | | | | | | | |
| 1 | Illinois 21 (Station)..... | 106.8 | 5.2 | 20.7 | 93 | 86 | M-high | 9.6 | 4.7 |
| 2 | Stiegelmeier S-379..... | 105.8 | 1.2 | 20.7 | 95 | 86 | Medium | 9.2 | 4.7 |
| 3 | Huey H-42..... | 103.6 | 0 | 20.6 | 96 | 87 | M-high | 9.4 | 4.3 |
| 4 | Illinois 1091 (Mountjoy)..... | 103.2 | 5.7 | 20.4 | 95 | 86 | Medium | 9.4 | 4.7 |
| 5 | Schwenk S-34..... | 103.1 | 2.3 | 22.2 | 93 | 89 | M-high | 8.9 | 4.6 |
| 6 | Stiegelmeier S-370..... | 102.5 | 2.9 | 23.1 | 91 | 89 | M-high | 10.1 | 4.8 |
| 7 | Stewart S-130..... | 102.4 | 1.8 | 22.2 | 94 | 85 | Medium | 9.6 | 4.8 |
| 8 | P.A.G. 170..... | 101.2 | 1.6 | 21.0 | 93 | 85 | Medium | 8.9 | 4.3 |
| 9 | Pioneer 313B..... | 100.7 | 2.7 | 23.3 | 91 | 89 | M-high | 9.2 | 5.0 |
| 10 | Crow 660..... | 100.2 | 3.1 | 21.1 | 92 | 86 | Medium | 10.0 | 4.7 |
| 11 | Illinois 1570 (Station)..... | 100.0 | .7 | 22.6 | 90 | 89 | M-high | 9.4 | 4.6 |
| 12 | Lowe 24..... | 100.0 | .3 | 20.9 | 96 | 83 | Medium | 9.4 | 4.6 |
| 13 | Morton M-30..... | 99.9 | 2.4 | 22.8 | 95 | 84 | Medium | 9.3 | 4.5 |
| 14 | Lowe 520..... | 99.8 | 1.6 | 28.6 | 88 | 83 | High | 9.6 | 5.0 |
| 15 | Bear OK-55..... | 99.7 | 3.0 | 23.7 | 93 | 83 | Medium | 9.0 | 4.4 |
| 16 | Morton M-12..... | 99.0 | 1.3 | 23.0 | 95 | 89 | Medium | 9.9 | 4.6 |
| 17 | Schwenk S-24..... | 98.0 | 4.2 | 21.6 | 96 | 83 | M-high | 9.8 | 4.6 |
| 18 | Ainsworth X-13-3..... | 97.8 | 4.3 | 22.1 | 98 | 77 | High | 9.7 | 4.6 |
| 19 | Ferris F-12..... | 97.7 | 2.9 | 21.3 | 96 | 81 | M-low | 10.5 | 4.8 |
| 20 | Funk G-93..... | 97.6 | .8 | 20.6 | 96 | 79 | M-high | 10.2 | 4.6 |
| 21 | Illinois 1277 (Station)..... | 97.5 | .1 | 20.0 | 98 | 82 | M-low | 9.8 | 4.9 |
| 22 | Illinois 1558 (Station)..... | 97.2 | 0 | 20.6 | 98 | 85 | M-low | 9.7 | 4.6 |
| 23 | Ainsworth X-21..... | 96.7 | 3.4 | 21.6 | 98 | 80 | M-high | 9.9 | 5.1 |
| 24 | Producers 900..... | 96.5 | 3.1 | 22.9 | 91 | 79 | M-high | 9.8 | 5.0 |
| 25 | Munson M-13..... | 95.9 | .5 | 23.5 | 91 | 87 | Medium | 9.2 | 4.8 |
| 26 | Huey H-23..... | 95.8 | 4.8 | 20.8 | 96 | 80 | Medium | 9.7 | 4.6 |
| 27 | Sieben S-340..... | 95.7 | .9 | 19.8 | 95 | 81 | Medium | 9.8 | 4.3 |
| 28 | Doubet D-3W..... | 95.1 | 1.0 | 20.2 | 98 | 77 | M-low | 9.0 | 5.0 |
| 29 | Pioneer 301..... | 94.9 | 3.5 | 22.1 | 94 | 85 | M-low | 9.9 | 4.8 |
| 30 | Illinois 1337 (Dittmer)..... | 94.8 | .7 | 23.7 | 94 | 80 | M-high | 9.8 | 4.7 |
| 31 | Pioneer 304..... | 94.7 | 3.0 | 23.3 | 97 | 83 | M-high | 9.5 | 5.2 |
| 32 | U.S. 13 (Station)..... | 94.6 | 2.1 | 21.6 | 92 | 88 | M-high | 9.5 | 4.6 |
| 33 | Lowe 514..... | 94.5 | 1.5 | 23.2 | 91 | 86 | M-high | 9.2 | 4.9 |
| 34 | Doubet D-25..... | 94.1 | 1.1 | 19.1 | 97 | 81 | Medium | 10.5 | 4.7 |

(Table is concluded on next page)

Table 7. — WEST NORTH-CENTRAL ILLINOIS: Galesburg — concluded

| Rank | Entry | Total acre yield | Damaged corn in shelled sample | Mois- ture in grain at harvest | Erect plants | Stand | Height of ear | Protein | Oil |
|--------------------------|------------------------------|------------------------|---|---|-----------------|---------------|------------------|---------------|---------------|
| 1950 RESULTS — concluded | | | | | | | | | |
| | | <i>bu.</i> | <i>perct.</i> | <i>perct.</i> | <i>perct.</i> | <i>perct.</i> | | <i>perct.</i> | <i>perct.</i> |
| 35 | Illinois 1289 (Station)..... | 93.9 | 1.5 | 20.3 | 98 | 87 | Low | 10.0 | 4.8 |
| 35 | Cargill 300..... | 93.9 | 1.0 | 20.3 | 90 | 85 | M-high | 10.1 | 5.0 |
| 37 | Plymouth 38..... | 93.8 | 1.3 | 21.3 | 92 | 78 | M-high | 9.6 | 4.6 |
| 38 | Pioneer 339..... | 93.7 | 1.2 | 21.0 | 96 | 73 | Medium | 9.4 | 4.9 |
| 39 | DeKalb 847..... | 93.6 | 3.7 | 19.5 | 94 | 81 | Medium | 10.4 | 4.6 |
| 39 | P.A.G. 4506..... | 93.6 | 3.2 | 22.9 | 92 | 84 | M-low | 9.9 | 5.2 |
| 41 | Pfister 187 Hybrid 1897..... | 93.5 | 1.9 | 20.8 | 93 | 85 | Medium | 8.6 | 4.3 |
| 42 | National 115A..... | 93.3 | 2.4 | 19.1 | 96 | 84 | Medium | 10.9 | 5.0 |
| 43 | Plymouth 11..... | 93.1 | 7.1 | 21.6 | 95 | 83 | Medium | 9.9 | 5.0 |
| 44 | Munson MH..... | 92.4 | 1.4 | 20.6 | 94 | 70 | Medium | 10.4 | 5.1 |
| 44 | Producers 940..... | 92.4 | 1.2 | 23.6 | 98 | 69 | Medium | 10.4 | 4.7 |
| 46 | Ioweth AQ..... | 92.2 | .4 | 20.1 | 95 | 80 | Medium | 10.4 | 4.9 |
| 46 | P.A.G. 270..... | 92.2 | 1.9 | 19.4 | 94 | 83 | Medium | 9.3 | 4.5 |
| 48 | Holmes 39..... | 91.5 | 6.6 | 23.5 | 95 | 82 | M-high | 9.1 | 4.9 |
| 49 | Funk G-77A..... | 91.4 | .9 | 18.4 | 95 | 74 | M-high | 10.5 | 4.9 |
| 49 | Pfister 187 Hybrid 456..... | 91.4 | 1.3 | 19.8 | 97 | 79 | M-low | 9.5 | 4.6 |
| 51 | DeKalb 628A..... | 90.6 | .8 | 23.7 | 92 | 84 | M-high | 9.8 | 4.8 |
| 51 | Sieben S-440..... | 90.6 | .4 | 19.2 | 98 | 77 | M-low | 9.2 | 4.3 |
| 53 | P.A.G. 392..... | 90.4 | 4.6 | 19.4 | 95 | 81 | Medium | 9.4 | 4.6 |
| 54 | Producers E360..... | 90.1 | .9 | 20.6 | 95 | 78 | M-low | 9.9 | 5.3 |
| 55 | Funk G-95..... | 89.8 | 2.2 | 22.2 | 92 | 82 | Medium | 10.0 | 4.8 |
| 56 | Funk G-169..... | 89.6 | .1 | 22.9 | 93 | 83 | Medium | 10.2 | 4.8 |
| 57 | Holmes 19A..... | 89.4 | .6 | 20.5 | 96 | 81 | M-low | 10.1 | 4.7 |
| 58 | DeKalb 627..... | 89.1 | .6 | 19.9 | 93 | 75 | M-low | 10.0 | 4.8 |
| 59 | Kelly K-374..... | 88.5 | 6.4 | 19.2 | 92 | 79 | M-high | 9.9 | 4.6 |
| 60 | Bo-Jac 68..... | 88.4 | 2.1 | 20.5 | 96 | 73 | M-high | 10.8 | 4.9 |
| 61 | Crow "Deep Root"..... | 88.2 | .1 | 19.8 | 97 | 80 | Medium | 9.6 | 4.8 |
| 62 | Munson M-19-1..... | 87.7 | 5.6 | 20.4 | 92 | 84 | Medium | 9.9 | 4.9 |
| 63 | Funk G-37..... | 87.6 | .8 | 22.0 | 96 | 79 | Medium | 10.5 | 5.0 |
| 63 | Moews 14L..... | 87.6 | 6.7 | 21.0 | 96 | 76 | Medium | 9.9 | 4.3 |
| 65 | Keystone 32..... | 86.6 | 6.6 | 19.8 | 96 | 84 | Medium | 10.1 | 4.7 |
| 66 | DeKalb 817A..... | 86.5 | 1.1 | 20.4 | 95 | 85 | Medium | 10.1 | 4.8 |
| 66 | National 125-1..... | 86.5 | .8 | 21.5 | 96 | 78 | Medium | 10.3 | 4.7 |
| 68 | Keystone 38..... | 86.4 | 2.1 | 20.3 | 94 | 78 | Medium | 9.9 | 4.3 |
| 68 | Producers 730..... | 86.4 | 1.9 | 22.2 | 95 | 75 | M-high | 9.9 | 4.8 |
| 70 | Pioneer 336..... | 85.9 | 5.2 | 21.3 | 93 | 74 | M-high | 10.1 | 5.4 |
| 71 | Ferris 11..... | 85.8 | 1.1 | 20.2 | 96 | 81 | M-low | 10.2 | 4.9 |
| 72 | Kelly K-42..... | 85.1 | 2.6 | 20.2 | 95 | 85 | Medium | 10.1 | 4.9 |
| 73 | P.A.G. 347..... | 84.9 | 4.4 | 18.5 | 92 | 83 | M-low | 9.4 | 5.1 |
| 74 | Bear OK-60..... | 84.7 | .5 | 21.1 | 92 | 84 | M-low | 9.6 | 4.4 |
| 75 | Crow 607..... | 84.4 | 3.7 | 21.3 | 98 | 73 | Medium | 9.8 | 4.6 |
| 76 | Moews 14..... | 83.9 | 4.7 | 19.2 | 95 | 73 | M-low | 9.5 | 5.0 |
| 77 | Sieben S-440E..... | 82.7 | .2 | 19.8 | 97 | 72 | Low | 9.4 | 5.0 |
| 78 | Moews 520..... | 81.4 | 1.9 | 20.8 | 93 | 75 | Medium | 10.8 | 4.7 |
| 79 | DeKalb 666..... | 81.1 | .3 | 21.9 | 97 | 78 | Medium | 9.2 | 4.7 |
| 80 | Moews 550..... | 79.8 | 5.5 | 20.2 | 94 | 81 | Medium | 9.6 | 5.1 |
| 81 | Stiegelmeier S-340..... | 73.0 | .3 | 19.0 | 97 | 58 | M-low | 9.9 | 3.8 |
| | Average of all entries..... | 92.8 | 2.3 | 21.2 | 95 | 81 | ..... | 9.8 | 4.7 |

* Average of U. S. 13 (Morgan, Lepper) 1948; U. S. 13 (Lepper) 1949; U. S. 13 (Station) 1950.

Table 8. — EAST NORTH-CENTRAL ILLINOIS: Sheldon

| Rank | Entry | Total acre yield | Damaged corn in shelled sample | Mois- ture in grain at harvest | Erect plants | Stand | Height of ear | Protein | Oil |
|--|-----------------------------|------------------------|---|---|-----------------|---------------|------------------|---------------|---------------|
| SUMMARY 1948-1950: Less than 2.9 bushels difference between total yields of any two entries is not significant. | | | | | | | | | |
| | | <i>bu.</i> | <i>perct.</i> | <i>perct.</i> | <i>perct.</i> | <i>perct.</i> | | <i>perct.</i> | <i>perct.</i> |
| 1 | Illinois 21 (Station)..... | 102.6 | 1.4 | 22.5 | 83 | .. | M-high | 10.3 | 4.7 |
| 2 | P.A.G. 164..... | 102.1 | 2.7 | 23.3 | 86 | .. | M-high | 9.9 | 4.7 |
| 3 | U.S. 13 (Station)..... | 100.7 | 1.5 | 22.9 | 81 | .. | High | 9.8 | 4.6 |
| 4 | Crow 608..... | 99.5 | 1.0 | 23.4 | 81 | .. | Medium | 10.1 | 4.7 |
| 5 | P.A.G. 392..... | 98.8 | 1.0 | 21.6 | 87 | .. | Medium | 10.3 | 4.6 |
| 6 | Ainsworth X-21..... | 97.5 | 2.2 | 23.2 | 87 | .. | M-high | 10.4 | 4.7 |
| 7 | Producers 900..... | 96.5 | 2.8 | 21.9 | 87 | .. | M-high | 10.1 | 4.9 |
| 8 | Producers 940..... | 96.3 | 2.2 | 22.5 | 88 | .. | High | 10.0 | 4.7 |
| 9 | Lowe 514..... | 96.1 | 2.9 | 23.2 | 84 | .. | Medium | 10.2 | 4.8 |
| 9 | Lowe 523..... | 96.1 | 2.8 | 23.1 | 84 | .. | Medium | 9.9 | 4.8 |
| 11 | Super-Crost S-12..... | 95.1 | .8 | 21.4 | 82 | .. | M-low | 10.5 | 4.7 |
| 12 | Morton M-12..... | 94.3 | 3.6 | 22.4 | 87 | .. | M-high | 10.4 | 4.7 |
| 13 | Frey 645..... | 93.7 | 2.7 | 22.6 | 82 | .. | Medium | 10.0 | 4.8 |
| 14 | Crow 633..... | 93.4 | 2.0 | 22.3 | 85 | .. | Medium | 10.4 | 4.9 |
| 15 | Doubet D-3W..... | 90.7 | 6.4 | 22.2 | 87 | .. | M-low | 9.9 | 4.6 |
| 16 | Super-Crost FD-6..... | 89.2 | 1.0 | 21.9 | 85 | .. | Medium | 10.4 | 4.7 |
| 17 | Kelly K-77..... | 86.8 | 1.3 | 23.3 | 84 | .. | Medium | 10.4 | 4.6 |
| 18 | Lowe 520..... | 86.4 | 2.8 | 27.7 | 84 | .. | M-high | 10.1 | 4.8 |
| 19 | Moews 520..... | 85.5 | 2.3 | 23.4 | 88 | .. | Medium | 10.4 | 4.6 |
| 20 | Frey 425..... | 83.2 | 2.9 | 24.6 | 72 | .. | M-low | 9.7 | 4.8 |
| | Average of all entries..... | 94.2 | 2.3 | 23.0 | 84 | .. | | 10.2 | 4.7 |

1950 RESULTS: Less than 7.0 bushels difference between
total yields of any two entries is not significant.

| | | | | | | | | | |
|----|------------------------------|-------|-----|------|----|----|--------|------|-----|
| 1 | Illinois 21 (Station)..... | 104.5 | 1.3 | 23.2 | 83 | 99 | M-high | 9.6 | 4.7 |
| 2 | Holmes 13..... | 102.8 | 3.4 | 24.7 | 92 | 97 | Medium | 9.4 | 4.6 |
| 3 | Ainsworth X-13-3..... | 102.1 | .5 | 24.7 | 91 | 98 | M-high | 10.1 | 4.4 |
| 4 | Farmerart FC-81..... | 101.4 | .7 | 22.0 | 92 | 97 | Medium | 10.1 | 4.6 |
| 5 | Frey 692..... | 100.0 | .6 | 21.2 | 96 | 95 | Medium | 8.4 | 4.4 |
| 5 | Lowe 514..... | 100.0 | 2.9 | 24.6 | 87 | 97 | M-high | 9.8 | 4.7 |
| 7 | Illinois 1246 (Station)..... | 98.9 | .7 | 20.0 | 91 | 98 | M-high | 9.6 | 4.7 |
| 8 | Pioneer 332..... | 97.1 | 3.8 | 25.8 | 90 | 97 | M-high | 8.3 | 4.2 |
| 9 | Huey H-23..... | 96.6 | .6 | 22.0 | 87 | 98 | M-high | 9.4 | 4.4 |
| 10 | Illinois 1421 (Station)..... | 96.2 | .8 | 23.2 | 95 | 97 | Medium | 9.1 | 4.4 |
| 11 | Appl 1766..... | 95.9 | .3 | 23.2 | 94 | 94 | M-high | 9.9 | 4.5 |
| 12 | P.A.G. 392..... | 95.8 | .4 | 20.6 | 92 | 95 | M-high | 9.9 | 4.4 |
| 13 | Frey 644..... | 95.5 | .8 | 24.0 | 92 | 97 | Medium | 9.6 | 4.6 |
| 14 | Schwenk S-34..... | 95.2 | .2 | 24.4 | 93 | 92 | M-high | 9.7 | 4.4 |
| 15 | Crow 608..... | 95.0 | .4 | 24.1 | 96 | 92 | Medium | 9.4 | 4.8 |
| 16 | Pioneer 304..... | 94.4 | .1 | 26.0 | 92 | 97 | M-high | 9.1 | 5.2 |
| 17 | Illinois 1570 (Station)..... | 94.2 | .2 | 23.9 | 91 | 99 | M-high | 9.7 | 4.5 |
| 18 | Holmes 39..... | 94.0 | .4 | 24.0 | 91 | 98 | M-high | 7.7 | 4.6 |
| 18 | Pioneer 300..... | 94.0 | .1 | 24.2 | 91 | 94 | M-high | 10.0 | 4.6 |
| 20 | Morton M-12..... | 93.9 | .4 | 21.4 | 92 | 97 | Medium | 9.7 | 4.9 |
| 21 | National 115A..... | 93.8 | 1.8 | 22.9 | 90 | 99 | M-high | 8.8 | 4.6 |
| 21 | Pioneer 313B..... | 93.8 | 1.9 | 22.9 | 90 | 97 | M-high | 9.1 | 4.7 |
| 23 | Producers 900..... | 93.6 | .1 | 21.1 | 91 | 94 | M-high | 9.9 | 5.0 |
| 24 | Frey 645..... | 93.2 | 2.5 | 23.5 | 94 | 94 | Medium | 8.7 | 4.7 |
| 24 | P.A.G. 164..... | 93.2 | 4.1 | 24.3 | 88 | 97 | M-high | 9.4 | 4.7 |
| 26 | Ainsworth X-21..... | 92.8 | 3.2 | 22.0 | 89 | 96 | M-high | 8.3 | 4.6 |
| 27 | Appl 136..... | 92.7 | 1.5 | 24.0 | 88 | 93 | Medium | 9.5 | 4.4 |
| 27 | Producers 730..... | 92.7 | 2.9 | 24.1 | 94 | 97 | M-high | 9.4 | 4.4 |
| 29 | Appl 1337..... | 92.6 | .6 | 24.1 | 92 | 94 | Medium | 9.9 | 4.9 |
| 29 | Corn Belt 65A..... | 92.6 | .2 | 22.6 | 90 | 98 | M-high | 8.0 | 4.7 |
| 31 | Illinois 1558 (Station)..... | 92.4 | .3 | 23.3 | 95 | 98 | Low | 9.4 | 4.4 |
| 31 | Trisler T-19A..... | 92.4 | .4 | 22.7 | 92 | 92 | Low | 10.1 | 4.7 |
| 33 | DeKalb 800A..... | 92.2 | .2 | 24.8 | 86 | 97 | M-high | 9.8 | 4.9 |
| 34 | Bear OK-31..... | 92.0 | .2 | 21.0 | 85 | 94 | M-low | 10.5 | 4.7 |

(Table is concluded on next page)

Table 8. — EAST NORTH-CENTRAL ILLINOIS: Sheldon — concluded

| Rank | Entry | Total acre yield | Damaged corn in shelled sample | Mois- ture in grain at harvest | Erect plants | Stand | Height of ear | Protein | Oil |
|--------------------------|------------------------------|------------------------|---|---|-----------------|---------------|------------------|---------------|---------------|
| 1950 RESULTS — concluded | | | | | | | | | |
| | | <i>bu.</i> | <i>perct.</i> | <i>perct.</i> | <i>perct.</i> | <i>perct.</i> | | <i>perct.</i> | <i>perct.</i> |
| 35 | Trisler T-19..... | 91.9 | | 22.3 | 87 | 96 | Medium | 9.9 | 4.6 |
| 36 | Crow 633..... | 91.5 | .4 | 23.3 | 89 | 93 | M-high | 9.9 | 5.0 |
| 37 | DeKalb 847..... | 90.8 | 1.0 | 23.7 | 92 | 95 | M-high | 9.8 | 5.1 |
| 37 | Pioneer 335..... | 90.8 | 3.2 | 23.9 | 91 | 97 | Medium | 10.1 | 4.7 |
| 39 | Funk G-77A..... | 89.2 | 1.1 | 22.6 | 90 | 95 | Medium | 10.2 | 4.7 |
| 40 | Lowe 520..... | 89.1 | .3 | 30.8 | 92 | 92 | High | 9.1 | 5.1 |
| 41 | Funk G-95..... | 89.0 | .3 | 25.8 | 89 | 97 | M-high | 8.9 | 4.5 |
| 42 | U.S. 13 (Station)..... | 88.9 | .1 | 23.3 | 87 | 98 | M-high | 8.7 | 4.3 |
| 43 | P.A.G. 170..... | 88.7 | .5 | 21.8 | 88 | 91 | Medium | 8.9 | 4.1 |
| 44 | P.A.G. 4897..... | 88.1 | .4 | 20.3 | 85 | 98 | Medium | 8.6 | 4.0 |
| 44 | Super-Crost 746..... | 88.1 | .3 | 23.4 | 91 | 96 | Medium | 8.8 | 4.6 |
| 44 | Super-Crost 840A..... | 88.1 | .5 | 24.3 | 93 | 97 | Medium | 9.7 | 4.7 |
| 47 | Kelly K-77..... | 88.0 | .5 | 24.5 | 91 | 96 | M-high | 10.4 | 4.9 |
| 47 | Kelly T-33A..... | 88.0 | 3.1 | 25.1 | 89 | 94 | M-high | 9.3 | 4.6 |
| 49 | Pfister 187 Hybrid 380..... | 87.7 | .6 | 24.3 | 85 | 92 | M-low | 8.8 | 4.7 |
| 49 | Stiegelmeier S-370..... | 87.7 | 0 | 23.4 | 91 | 94 | Medium | 9.1 | 4.5 |
| 51 | Super-Crost S-12..... | 87.1 | .2 | 23.2 | 80 | 96 | Medium | 10.2 | 4.7 |
| 52 | Crow 660..... | 86.9 | .2 | 23.2 | 95 | 95 | Medium | 10.0 | 4.7 |
| 52 | Doubet D-25..... | 86.9 | .4 | 22.0 | 88 | 95 | Medium | 10.4 | 4.7 |
| 54 | Bear OK-24..... | 86.5 | 0 | 20.1 | 74 | 96 | Medium | 9.7 | 4.1 |
| 55 | DeKalb 666..... | 86.2 | 1.3 | 23.2 | 89 | 94 | Medium | 9.3 | 4.6 |
| 55 | Morton M-30..... | 86.2 | 1.2 | 22.9 | 86 | 96 | Medium | 8.3 | 4.1 |
| 57 | National 118..... | 86.1 | 1.7 | 22.9 | 85 | 96 | Medium | 9.3 | 4.5 |
| 58 | Funk G-37..... | 86.0 | .2 | 23.3 | 92 | 96 | M-high | 9.1 | 4.9 |
| 59 | Lowe 523..... | 85.9 | .8 | 25.1 | 92 | 87 | Medium | 9.4 | 4.9 |
| 60 | P.A.G. 347..... | 85.8 | .2 | 21.9 | 92 | 95 | Medium | 10.0 | 4.5 |
| 61 | Kelly K-374..... | 85.2 | 1.0 | 21.6 | 88 | 95 | M-high | 9.3 | 4.7 |
| 62 | Pfister 187 Hybrid 456..... | 85.1 | .4 | 23.5 | 93 | 92 | Medium | 8.8 | 4.2 |
| 63 | Funk G-114..... | 85.0 | 2.6 | 22.6 | 97 | 94 | Low | 10.1 | 4.4 |
| 64 | Crow "Deep Root"..... | 84.8 | .5 | 22.4 | 93 | 93 | Medium | 9.2 | 4.8 |
| 65 | Funk G-16A..... | 84.6 | .2 | 23.0 | 96 | 91 | M-low | 9.5 | 4.5 |
| 66 | Moews 520..... | 84.5 | 3.9 | 24.0 | 91 | 96 | Medium | 9.8 | 4.8 |
| 67 | Funk G-169..... | 84.1 | .2 | 24.0 | 92 | 90 | High | 8.9 | 4.7 |
| 67 | Pfister 187 Hybrid 1897..... | 84.1 | 5.2 | 22.4 | 86 | 96 | M-high | 9.0 | 4.2 |
| 69 | Frey 425..... | 83.3 | 3.5 | 23.4 | 93 | 94 | Medium | 8.1 | 4.6 |
| 70 | Doubet D-3W..... | 82.7 | 3.1 | 22.2 | 91 | 95 | M-low | 9.4 | 4.4 |
| 71 | Pfister 187 Hybrid 789..... | 82.3 | .3 | 21.8 | 91 | 90 | Medium | 8.9 | 4.6 |
| 71 | Producers 940..... | 82.3 | 3.4 | 24.5 | 93 | 96 | M-high | 9.0 | 4.3 |
| 73 | Farmercraft FC-45..... | 82.1 | .6 | 23.3 | 83 | 94 | Medium | 8.9 | 4.1 |
| 74 | Lowe 640..... | 81.6 | 2.0 | 33.5 | 94 | 95 | High | 9.6 | 5.0 |
| 75 | Stiegelmeier S-340..... | 81.4 | 1.3 | 20.8 | 95 | 83 | M-low | 10.8 | 3.8 |
| 76 | Crow 607..... | 81.2 | .1 | 22.4 | 95 | 91 | Medium | 8.7 | 4.0 |
| 77 | DeKalb 817A..... | 80.7 | .7 | 24.2 | 91 | 96 | M-high | 9.0 | 4.9 |
| 78 | DeKalb 628A..... | 80.5 | .2 | 23.3 | 90 | 96 | Medium | 8.9 | 4.5 |
| 79 | Moews 14..... | 77.9 | .5 | 21.2 | 93 | 93 | Low | 9.6 | 4.2 |
| 80 | Super-Crost FD-6..... | 77.6 | 1.3 | 23.5 | 89 | 91 | Medium | 9.7 | 4.7 |
| 81 | Moews 550..... | 77.5 | 1.3 | 22.7 | 90 | 91 | Medium | 9.9 | 4.7 |
| | Average of all entries..... | 89.7 | 1.1 | 23.4 | 90 | 95 | ..... | 9.4 | 4.6 |

Table 9. — SOUTH-CENTRAL ILLINOIS: Sullivan

| Rank | Entry | Total acre yield | Damaged corn in shelled sample | Mois- ture in grain at harvest | Erect plants | Stand | Height of ear | Protein | Oil |
|--|---------------------------------|------------------------|---|---|-----------------|--------|------------------|---------|--------|
| SUMMARY 1948-1950: Less than 3.8 bushels difference between total yields of any two entries is not significant. | | | | | | | | | |
| | | bu. | perct. | perct. | perct. | perct. | | perct. | perct. |
| 1 | Bear OK-72..... | 101.7 | 2.9 | 18.4 | 64 | .. | Medium | 9.8 | 4.8 |
| 2 | Keystone 45..... | 99.1 | 2.6 | 20.3 | 59 | .. | High | 9.8 | 5.2 |
| 3 | P.A.G. 392..... | 98.3 | 2.8 | 17.8 | 72 | .. | Medium | 9.6 | 4.4 |
| 4 | Ainsworth X-13-3..... | 96.9 | 3.0 | 19.1 | 62 | .. | Medium | 9.7 | 4.5 |
| 5* | U.S. 13..... | 96.7 | 4.6 | 18.7 | 56 | .. | M-high | 9.6 | 4.4 |
| 6 | Bear OK-66..... | 95.5 | 2.8 | 20.8 | 64 | .. | Medium | 9.7 | 4.6 |
| 7 | P.A.G. 170..... | 95.4 | 2.6 | 18.7 | 59 | .. | Medium | 9.1 | 4.1 |
| 8 | P.A.G. 173..... | 95.3 | 4.3 | 18.7 | 60 | .. | M-high | 9.7 | 4.5 |
| 9 | Illinois 21 (Powers)..... | 95.1 | 3.0 | 19.1 | 69 | .. | Medium | 9.8 | 4.7 |
| 10 | Illinois 2216(W) (Station)..... | 94.7 | 1.9 | 20.5 | 59 | .. | High | 9.6 | 4.0 |
| 11 | Canterbury 404..... | 94.6 | 1.7 | 19.1 | 71 | .. | Medium | 9.7 | 4.6 |
| 12 | Whisnand 804..... | 94.3 | 1.2 | 18.4 | 64 | .. | Medium | 9.9 | 4.7 |
| 13 | Producers 900..... | 93.9 | 6.7 | 19.0 | 58 | .. | Medium | 9.9 | 4.8 |
| 13 | Funk G-99..... | 93.9 | 3.9 | 20.9 | 51 | .. | M-high | 10.3 | 4.7 |
| 15 | National 125..... | 93.6 | 2.5 | 19.4 | 66 | .. | Medium | 9.4 | 4.7 |
| 16 | Kelly K-88..... | 92.3 | 2.9 | 19.1 | 57 | .. | Medium | 9.5 | 4.8 |
| 17 | Crow 805..... | 92.0 | 1.8 | 19.2 | 64 | .. | Medium | 9.8 | 4.8 |
| 18 | DeKalb 875..... | 91.9 | 4.4 | 19.5 | 70 | .. | M-low | 10.7 | 4.3 |
| 19 | Lowe 523..... | 91.6 | 2.9 | 19.3 | 64 | .. | Medium | 9.6 | 4.6 |
| 20 | National 125-1..... | 90.3 | 3.0 | 18.4 | 69 | .. | Medium | 10.2 | 4.7 |
| 21 | Kelly K-44..... | 87.7 | 2.9 | 18.4 | 63 | .. | M-low | 9.8 | 4.8 |
| 22 | Lowe 514..... | 85.1 | 3.4 | 18.7 | 57 | .. | M-low | 10.1 | 4.5 |
| | Average of all entries..... | 94.1 | 3.1 | 19.2 | 63 | .. | ..... | 9.8 | 4.6 |

1950 RESULTS: Less than 6.0 bushels difference between
total yields of any two entries is not significant.

| | | | | | | | | | |
|----|-------------------------------|------|------|------|----|----|--------|------|-----|
| 1 | Bear OK-72..... | 98.2 | 6.0 | 17.8 | 44 | 97 | Medium | 10.0 | 4.8 |
| 2 | National 126T..... | 96.9 | 3.7 | 17.7 | 48 | 99 | M-high | 10.2 | 4.7 |
| 3 | Ainsworth X-14-3..... | 96.3 | 2.7 | 18.9 | 46 | 98 | Medium | 9.9 | 4.4 |
| 4 | Trisler T-32..... | 93.6 | 5.2 | 17.9 | 40 | 96 | Medium | 9.6 | 4.4 |
| 5 | Pioneer 301..... | 93.5 | 3.3 | 19.5 | 24 | 99 | Medium | 9.9 | 4.3 |
| 6 | Funk G-79..... | 91.8 | 2.3 | 20.1 | 26 | 97 | M-high | 10.1 | 4.6 |
| 7 | Whisnand 804..... | 91.6 | 3.4 | 18.9 | 40 | 98 | Medium | 9.9 | 4.7 |
| 8 | Morton M-12..... | 91.5 | 1.4 | 19.1 | 40 | 97 | Medium | 9.9 | 4.6 |
| 9 | Corn Belt 60A..... | 91.4 | 11.4 | 19.5 | 23 | 96 | Medium | 9.8 | 4.4 |
| 10 | Pioneer 302..... | 91.3 | 2.6 | 20.4 | 46 | 99 | Medium | 10.2 | 5.0 |
| 10 | Pioneer 332..... | 91.3 | 4.3 | 20.3 | 22 | 97 | Medium | 10.2 | 4.1 |
| 12 | Canterbury 456..... | 91.0 | 5.2 | 19.6 | 36 | 98 | M-high | 9.3 | 4.7 |
| 13 | Canterbury 420..... | 90.9 | ..8 | 19.2 | 41 | 97 | Medium | 10.3 | 4.9 |
| 14 | Bear OK-85..... | 90.8 | 5.8 | 19.8 | 63 | 97 | Medium | 9.9 | 4.6 |
| 15 | Keystone 45..... | 90.5 | 1.7 | 20.3 | 36 | 98 | M-high | 9.7 | 5.0 |
| 16 | Moews 523..... | 90.4 | 2.3 | 19.2 | 47 | 97 | Medium | 10.2 | 4.4 |
| 17 | Ainsworth X-13-3..... | 90.1 | 2.9 | 19.1 | 30 | 95 | M-high | 10.1 | 4.6 |
| 18 | Illinois 1445A (Station)..... | 89.7 | 3.1 | 20.3 | 29 | 99 | High | 10.9 | 4.8 |
| 19 | Stiegelmeier S-370..... | 89.6 | 7.1 | 18.8 | 32 | 98 | Medium | 9.6 | 4.4 |
| 20 | Illinois 1570 (Station)..... | 89.5 | 6.9 | 19.1 | 26 | 96 | Medium | 9.8 | 4.6 |
| 21 | Pocklington P-60..... | 89.3 | 5.0 | 17.2 | 44 | 97 | Medium | 10.1 | 4.2 |
| 22 | Funk G-99..... | 89.2 | 6.2 | 22.8 | 20 | 97 | Medium | 10.5 | 4.5 |
| 23 | Producers 940..... | 88.9 | 3.6 | 19.5 | 55 | 96 | Medium | 10.1 | 4.6 |
| 24 | Funk G-80..... | 88.7 | 3.9 | 20.5 | 44 | 98 | M-high | 9.9 | 5.0 |
| 25 | Bo-Jac 33..... | 88.6 | 1.6 | 20.2 | 42 | 98 | Medium | 10.0 | 4.2 |
| 26 | U.S. 13 (Station)..... | 88.5 | 9.9 | 18.8 | 19 | 98 | M-high | 10.0 | 4.1 |
| 27 | Canterbury 404..... | 88.1 | 2.1 | 19.4 | 58 | 96 | Medium | 9.7 | 4.7 |
| 28 | P.A.G. 164..... | 87.8 | 2.3 | 19.3 | 34 | 96 | Medium | 9.8 | 4.6 |
| 29 | Producers 1050..... | 87.5 | 5.2 | 19.7 | 38 | 97 | M-high | 10.2 | 4.5 |
| 30 | Illinois 21 (Powers)..... | 87.4 | ..7 | 19.6 | 56 | 97 | M-high | 9.8 | 4.5 |

(Table is concluded on next page)

Table 9. — SOUTH-CENTRAL ILLINOIS: Sullivan — concluded

| Rank | Entry | Total acre yield | Damaged corn in shelled sample | Mois- ture in grain at harvest | Erect plants | Stand | Height of ear | Protein | Oil |
|-----------------------------|---------------------------------|------------------------|---|---|-----------------|--------|------------------|---------|--------|
| 1950 RESULTS — concluded | | | | | | | | | |
| | | bu. | perct. | perct. | perct. | perct. | | perct. | perct. |
| 31 | Corn Belt 70A..... | 87.3 | 1.6 | 19.4 | 38 | 98 | Medium | 9.7 | 4.7 |
| 32 | Pioneer 300..... | 87.0 | 3.6 | 19.1 | 38 | 95 | Medium | 9.9 | 4.4 |
| 33 | Illinois 1337 (Stone)..... | 86.9 | 2.9 | 18.9 | 41 | 96 | Medium | 10.1 | 4.5 |
| 34 | Illinois 1246 (Mountjoy)..... | 86.7 | 4.2 | 17.9 | 36 | 97 | Medium | 10.6 | 4.8 |
| 34 | P.A.G. 392..... | 86.7 | 2.9 | 17.3 | 45 | 97 | Medium | 10.2 | 4.3 |
| 36 | P.A.G. 170..... | 86.5 | 2.2 | 18.6 | 24 | 97 | Medium | 9.6 | 4.0 |
| 37 | Trisler T-33..... | 86.4 | 5.8 | 18.8 | 37 | 98 | Medium | 9.8 | 4.7 |
| 38 | DeKalb 847..... | 86.0 | 8.1 | 17.9 | 40 | 98 | Medium | 10.7 | 4.6 |
| 39 | Ainsworth X-21..... | 85.8 | 2.3 | 19.6 | 44 | 98 | M-high | 9.9 | 4.5 |
| 40 | Appl 1337..... | 85.7 | 8.1 | 19.6 | 32 | 98 | Medium | 9.7 | 4.4 |
| 40 | Kelly K-77..... | 85.7 | 7 | 18.4 | 34 | 96 | Medium | 9.7 | 4.5 |
| 42 | Funk G-94..... | 85.4 | 3.5 | 18.2 | 43 | 99 | Medium | 9.4 | 4.3 |
| 42 | Illinois 1540 (Station)..... | 85.4 | 5.8 | 22.9 | 57 | 97 | High | 10.2 | 5.4 |
| 42 | Pocklington P-78..... | 85.4 | 1.2 | 19.5 | 53 | 98 | Medium | 10.4 | 4.3 |
| 45 | DeKalb 800A..... | 85.2 | 4.5 | 18.2 | 32 | 96 | Medium | 10.2 | 4.5 |
| 46 | Appl 136..... | 84.7 | 5.8 | 20.4 | 19 | 97 | Medium | 9.8 | 4.2 |
| 47 | DeKalb 817A..... | 84.6 | 2.5 | 18.7 | 46 | 98 | Medium | 10.4 | 5.0 |
| 47 | Trisler T-19..... | 84.6 | 3.5 | 17.9 | 14 | 98 | M-low | 9.9 | 4.7 |
| 49 | Producers 945..... | 84.4 | 5.4 | 19.2 | 33 | 97 | Medium | 10.3 | 4.8 |
| 50 | Crow 805..... | 84.3 | 2.3 | 19.1 | 47 | 95 | M-high | 9.8 | 4.8 |
| 50 | Illinois 1656 (Station)..... | 84.3 | 6.5 | 19.9 | 56 | 94 | Medium | 10.2 | 4.4 |
| 50 | Pfister 187 Hybrid 456..... | 84.3 | 1.5 | 20.5 | 30 | 97 | M-high | 9.9 | 4.2 |
| 53 | Appl 1766..... | 84.0 | 6.3 | 19.3 | 25 | 97 | Medium | 9.9 | 4.5 |
| 53 | Kelly K-88..... | 84.0 | 4.5 | 20.3 | 16 | 97 | Medium | 9.8 | 4.7 |
| 55 | Doubet D-41..... | 83.9 | 4.4 | 20.4 | 16 | 97 | Medium | 10.8 | 4.1 |
| 56 | Whisnand 831..... | 83.8 | 10.4 | 19.7 | 28 | 96 | M-high | 9.8 | 4.4 |
| 57 | Morton M-30..... | 83.7 | 2.8 | 19.5 | 29 | 96 | Medium | 9.2 | 4.2 |
| 58 | National 125..... | 83.6 | 6.0 | 18.8 | 41 | 95 | Medium | 9.6 | 4.6 |
| 59 | DeKalb 875..... | 83.4 | 8.3 | 19.5 | 45 | 97 | Medium | 10.8 | 4.1 |
| 60 | Lowe 523..... | 83.2 | 6.2 | 20.4 | 35 | 96 | Medium | 9.6 | 4.5 |
| 61 | Whisnand 804D..... | 83.1 | 6.6 | 18.5 | 31 | 98 | Medium | 10.6 | 4.4 |
| 62 | Lowe 520..... | 82.7 | 1.0 | 20.4 | 26 | 96 | High | 10.3 | 4.6 |
| 63 | Doubet D-42..... | 82.6 | 7.9 | 18.5 | 35 | 97 | Medium | 10.2 | 4.6 |
| 64 | Funk G-169..... | 82.4 | 3.4 | 19.9 | 25 | 98 | Medium | 10.2 | 4.8 |
| 65 | P.A.G. 173..... | 82.2 | 5.5 | 18.7 | 37 | 97 | M-high | 10.1 | 4.3 |
| 66 | Crow 607..... | 82.0 | 2.1 | 18.8 | 41 | 96 | Medium | 9.8 | 4.6 |
| 66 | Lowe 514..... | 82.0 | 2.9 | 20.4 | 12 | 93 | Medium | 10.3 | 4.3 |
| 68 | Super-Crost 840A..... | 81.7 | 7.7 | 19.8 | 42 | 98 | Medium | 9.6 | 4.4 |
| 69 | Crow 660..... | 81.6 | 1.4 | 18.5 | 24 | 97 | M-low | 10.0 | 4.9 |
| 70 | Keystone 38..... | 81.4 | 4.7 | 18.5 | 28 | 98 | Medium | 10.3 | 4.2 |
| 70 | Producers 900..... | 81.4 | 13.8 | 19.5 | 22 | 96 | Medium | 10.1 | 4.5 |
| 72 | P.A.G. 347..... | 80.7 | 2.6 | 19.3 | 27 | 99 | M-low | 9.9 | 4.3 |
| 73 | Bear OK-66..... | 80.6 | 2.4 | 23.8 | 39 | 95 | Medium | 10.6 | 4.6 |
| 74 | Stiegelmeier S-340..... | 80.4 | 1.5 | 17.6 | 49 | 94 | M-low | 10.3 | 3.4 |
| 75 | Pioneer 313B..... | 79.2 | 6.2 | 21.4 | 18 | 97 | Medium | 10.2 | 4.4 |
| 75 | Super-Crost 708(W)..... | 79.2 | 2.3 | 18.8 | 22 | 97 | M-high | 10.4 | 3.3 |
| 77 | National 125-1..... | 78.7 | 3.5 | 19.3 | 42 | 96 | M-low | 10.8 | 4.4 |
| 78 | Kelly K-44..... | 78.5 | 2.0 | 18.4 | 28 | 99 | M-low | 10.2 | 4.6 |
| 79 | Crow "Deep Root"..... | 78.2 | 7.0 | 17.8 | 15 | 97 | M-low | 9.6 | 5.0 |
| 80 | Bo-Jac 20..... | 77.2 | 4.2 | 20.3 | 15 | 99 | M-low | 10.0 | 4.2 |
| 81 | Illinois 2216(W) (Station)..... | 63.9 | 2.8 | 19.9 | 42 | 96 | High | 9.9 | 3.7 |
| Average of all entries..... | | 85.9 | 4.3 | 19.4 | 35 | 97 | ..... | 10.0 | 4.5 |

* Average of U.S. 13 (Stone, Morton, Daily, Appl, Kelly, Mountjoy, Pfeifer, Canterbury) 1948; U.S. 13 (Pfeifer, Stone, Wilson, Station) 1949; U.S. 13 (Station) 1950.

Table 10. — SOUTHERN ILLINOIS: (Alhambra 1947, 1949,
Brownstown 1950)

| Rank | Entry | Total acre yield | Damaged corn in shelled sample | Mois- ture in grain at harvest | Erect plants | Stand | Height of ear | Protein ^a | Oil ^a |
|--|---------------------------------|------------------------|---|---|-----------------|--------|------------------|----------------------|------------------|
| SUMMARY 1947, 1949, ^b 1950: Less than 5.9 bushels difference between total yields of any two entries is not significant. | | | | | | | | | |
| | | bu. | perct. | perct. | perct. | perct. | | perct. | perct. |
| 1 | Illinois 2214(W) (Station)... | 80.9 | 2.3 | 22.5 | 54 | .. | M-high | 9.0 | 4.5 |
| 2 | Illinois 1459 (Station)..... | 78.2 | 1.0 | 24.1 | 64 | .. | High | 10.8 | 5.4 |
| 3 | Pioneer 302..... | 71.2 | 1.3 | 23.3 | 68 | .. | Medium | 10.0 | 4.9 |
| 4 | Funk G-80..... | 69.1 | 1.6 | 22.1 | 67 | .. | Medium | 9.9 | 5.1 |
| 5 ^c | Illinois 784..... | 68.6 | 1.1 | 23.4 | 55 | .. | M-high | 9.6 | 4.8 |
| 6 | Doubet D-41..... | 68.1 | 1.8 | 21.9 | 71 | .. | Medium | 10.3 | 4.7 |
| 7 | Keystone 45..... | 67.9 | 1.0 | 21.5 | 64 | .. | Medium | 9.9 | 5.2 |
| 8 | Lowe 855(W)..... | 67.4 | 1.6 | 20.8 | 68 | .. | M-high | 10.0 | 4.1 |
| 9 | Keystone 106(W)..... | 67.2 | 1.1 | 22.1 | 57 | .. | M-high | 9.5 | 4.3 |
| 10 | P.A.G. 617(W)..... | 66.6 | .9 | 21.3 | 57 | .. | M-high | 9.7 | 4.0 |
| 10 | Pioneer 505(W)..... | 66.6 | 1.0 | 22.3 | 62 | .. | M-high | 9.6 | 4.0 |
| 12 | Lowe 820..... | 66.4 | 1.9 | 23.1 | 69 | .. | Medium | 9.9 | 4.9 |
| 13 | P.A.G. 173..... | 65.7 | 1.0 | 18.5 | 53 | .. | Medium | 9.9 | 4.7 |
| 14 ^d | Illinois 200..... | 63.3 | 1.2 | 20.9 | 56 | .. | Medium | 10.0 | 4.9 |
| 14 ^e | U.S. 13..... | 63.3 | 1.7 | 19.6 | 66 | .. | Medium | 9.7 | 4.4 |
| 16 | Keystone 38..... | 62.9 | .9 | 19.0 | 58 | .. | M-low | 10.0 | 4.4 |
| 17 | Super-Crost 708(W)..... | 62.3 | 2.0 | 20.7 | 50 | .. | M-high | 9.7 | 3.9 |
| 18 | DeKalb 875..... | 61.8 | 1.6 | 20.8 | 60 | .. | M-low | 10.9 | 4.5 |
| 19 | Embro 49..... | 60.4 | 1.6 | 20.6 | 58 | .. | M-high | 10.1 | 4.9 |
| 20 | Lowe 830..... | 59.7 | 1.7 | 21.6 | 50 | .. | Medium | 10.2 | 4.5 |
| 21 | Pioneer 300..... | 59.6 | 1.6 | 19.3 | 57 | .. | Medium | 9.9 | 4.2 |
| 22 | Pioneer 332..... | 58.9 | 1.4 | 20.8 | 47 | .. | Medium | 9.7 | 4.2 |
| 23 | National 129..... | 58.7 | 1.2 | 19.1 | 65 | .. | M-low | 10.4 | 4.8 |
| 24 | Lowe 523..... | 57.3 | 1.6 | 19.7 | 62 | .. | M-low | 9.2 | 4.4 |
| 25 | Crow 607..... | 54.3 | 2.2 | 20.4 | 68 | .. | Low | 9.5 | 4.6 |
| 26 | National 125..... | 51.3 | 4.8 | 20.2 | 63 | .. | Medium | 10.1 | 4.5 |
| | Average of all entries..... | 64.5 | 1.6 | 21.1 | 60 | .. | ..... | 9.9 | 4.6 |
| 1950 RESULTS: Less than 7.4 bushels difference between total yields of any two entries is not significant. | | | | | | | | | |
| 1 | Illinois 1445A (Station)..... | 99.1 | .7 | 23.2 | 71 | 94 | High | 10.4 | 4.9 |
| 2 | Producers E409..... | 97.6 | .2 | 20.5 | 77 | 93 | M-high | 9.8 | 5.5 |
| 3 | Haudrich 10(W)..... | 95.8 | 2.0 | 20.9 | 50 | 93 | High | 10.1 | 4.1 |
| 4 | Illinois 1459 (Station)..... | 93.8 | .3 | 25.1 | 72 | 89 | High | 11.4 | 5.4 |
| 5 | Lowe 640..... | 93.6 | .6 | 22.8 | 73 | 92 | High | 10.4 | 5.2 |
| 6 | Keystone 111(W)..... | 93.4 | 1.2 | 24.0 | 71 | 86 | Medium | 10.6 | 4.5 |
| 7 | Funk G-134..... | 92.2 | 4.8 | 21.3 | 59 | 92 | Medium | 10.4 | 4.4 |
| 8 | Illinois 1540 (Station)..... | 91.8 | .2 | 23.3 | 78 | 89 | High | 10.9 | 5.2 |
| 9 | Bear OK-110..... | 91.7 | .4 | 22.2 | 69 | 88 | Medium | 10.8 | 5.2 |
| 9 | P.A.G. 620(W)..... | 91.7 | .9 | 21.9 | 50 | 89 | M-high | 9.2 | 4.3 |
| 11 | Funk G-80..... | 91.1 | .3 | 22.1 | 59 | 93 | Medium | 9.8 | 5.4 |
| 12 | Bear OK-69..... | 90.8 | .5 | 21.9 | 80 | 89 | M-low | 10.3 | 4.6 |
| 13 | Tiemann 78..... | 90.5 | 1.4 | 18.4 | 78 | 92 | M-high | 10.3 | 4.7 |
| 14 | Lowe 820..... | 90.4 | .9 | 24.3 | 83 | 90 | M-high | 9.9 | 5.2 |
| 15 | Funk G-91..... | 90.1 | .5 | 20.9 | 78 | 87 | Medium | 9.6 | 4.7 |
| 15 | Illinois 2214(W) (Station)..... | 90.1 | 2.0 | 23.3 | 45 | 94 | M-high | 9.2 | 4.6 |
| 17 | Pioneer 302..... | 88.3 | 1.1 | 24.0 | 77 | 89 | M-high | 10.1 | 4.9 |
| 18 | Funk G-512(W)..... | 87.8 | 2.8 | 20.5 | 60 | 87 | High | 9.5 | 4.1 |
| 19 | Lowe 830..... | 87.4 | .8 | 22.6 | 65 | 85 | M-high | 10.4 | 5.0 |
| 20 | P.A.G. 173..... | 87.1 | .6 | 18.9 | 47 | 87 | M-low | 10.1 | 5.0 |
| 21 | Tiemann 93..... | 86.9 | .8 | 18.6 | 68 | 94 | Medium | 9.9 | 5.1 |
| 22 | Ainsworth N-14A..... | 86.6 | .5 | 22.2 | 61 | 95 | Medium | 10.5 | 5.2 |
| 23 | Ainsworth N-22..... | 86.3 | 1.6 | 25.1 | 28 | 91 | High | 9.8 | 5.2 |
| 23 | Canterbury 420..... | 86.3 | 1.1 | 20.4 | 85 | 92 | Medium | 10.4 | 4.8 |
| 25 | Whisnand 917(W)..... | 86.2 | .3 | 22.2 | 68 | 87 | High | 9.1 | 4.2 |
| 26 | Illinois 1570 (Station)..... | 85.8 | .1 | 19.4 | 62 | 93 | M-low | 9.9 | 4.9 |

(Table is concluded on next page)

Table 10. — SOUTHERN ILLINOIS: (Alhambra 1947, 1949, Brownstown 1950) — concluded

| Rank | Entry | Total acre yield | Damaged corn in shelled sample | Mois- ture in grain at harvest | Erect plants | Stand | Height of ear | Protein ^a | Oil ^a |
|-----------------------------|------------------------------|------------------------|---|---|-----------------|---------------|------------------|----------------------|------------------|
| 1950 RESULTS — concluded | | | | | | | | | |
| | | <i>bu.</i> | <i>perct.</i> | <i>perct.</i> | <i>perct.</i> | <i>perct.</i> | | <i>perct.</i> | <i>perct.</i> |
| 27 | Keystone 45..... | 85.6 | .4 | 21.9 | 47 | 89 | M-low | 10.1 | 5.5 |
| 28 | Ainsworth X-14-3..... | 84.6 | .4 | 19.5 | 74 | 87 | Medium | 10.2 | 4.9 |
| 29 | Haudrich 13..... | 84.4 | .3 | 20.9 | 73 | 89 | Medium | 10.4 | 4.6 |
| 30 | P.A.G. 617(W)..... | 84.0 | .7 | 20.8 | 45 | 82 | M-high | 9.9 | 3.9 |
| 31 | Funk G-98..... | 83.1 | .3 | 21.8 | 62 | 87 | Medium | 10.8 | 4.8 |
| 32 | Pioneer 510(W)..... | 82.8 | .8 | 21.6 | 70 | 87 | M-high | 9.6 | 4.0 |
| 33 | P.A.G. 631(W)..... | 82.6 | .6 | 24.3 | 45 | 90 | M-high | 9.6 | 4.4 |
| 33 | Pioneer 332..... | 82.6 | .7 | 21.8 | 24 | 90 | Medium | 9.3 | 4.6 |
| 35 | U.S. 13 (Lepper)..... | 82.5 | .8 | 19.3 | 65 | 86 | M-low | 9.9 | 4.7 |
| 36 | Super-Crost 1005B..... | 82.2 | .6 | 22.3 | 61 | 92 | Medium | 10.9 | 5.1 |
| 37 | Illinois 784 (Haudrich)..... | 81.9 | .5 | 22.4 | 55 | 82 | Medium | 10.0 | 5.2 |
| 37 | National 129..... | 81.9 | 1.5 | 20.0 | 65 | 85 | M-low | 10.4 | 5.0 |
| 39 | Embro 49..... | 81.8 | .3 | 19.7 | 54 | 91 | Medium | 10.3 | 4.8 |
| 40 | Pioneer 301..... | 80.7 | .7 | 19.4 | 71 | 93 | Low | 9.6 | 4.6 |
| 41 | S. S. 903(W)..... | 80.6 | 0 | 22.7 | 69 | 89 | M-high | 10.9 | 4.6 |
| 42 | Canterbury 126..... | 80.3 | .3 | 22.7 | 62 | 93 | Medium | 9.5 | 4.6 |
| 43 | Lowe 855(W)..... | 80.2 | .5 | 20.4 | 61 | 84 | High | 11.0 | 4.0 |
| 44 | DeKalb 847..... | 80.1 | 1.3 | 19.5 | 72 | 85 | M-low | 10.6 | 4.7 |
| 45 | Lowe 865(W)..... | 79.9 | .6 | 23.5 | 58 | 93 | M-high | 9.8 | 4.7 |
| 46 | P.A.G. 164..... | 79.2 | 1.9 | 18.7 | 48 | 90 | M-low | 10.3 | 5.3 |
| 46 | Pioneer 300..... | 79.2 | 2.2 | 20.9 | 33 | 87 | Medium | 9.4 | 4.7 |
| 48 | Canterbury 13..... | 78.9 | .5 | 20.8 | 67 | 88 | Medium | 9.9 | 4.4 |
| 49 | Producers 1050..... | 78.8 | .2 | 22.0 | 58 | 86 | M-low | 9.6 | 4.9 |
| 50 | Pioneer 505(W)..... | 78.1 | .3 | 21.8 | 57 | 86 | M-high | 9.8 | 4.0 |
| 51 | Moews 523..... | 77.2 | .3 | 20.4 | 72 | 87 | M-low | 9.8 | 5.2 |
| 52 | DeKalb 875..... | 77.0 | 1.9 | 21.5 | 59 | 86 | M-low | 10.9 | 4.8 |
| 52 | Funk G-145..... | 77.0 | 2.0 | 22.9 | 44 | 82 | Medium | 10.2 | 5.3 |
| 52 | Whisnand 834..... | 77.0 | 1.3 | 22.2 | 71 | 88 | Medium | 9.9 | 4.9 |
| 52 | U.S. 13 (Station)..... | 77.0 | .5 | 19.0 | 53 | 89 | Medium | 9.5 | 4.7 |
| 56 | Whisnand 831..... | 76.6 | .3 | 21.6 | 44 | 89 | Medium | 9.7 | 4.6 |
| 57 | DeKalb 800A..... | 76.5 | 1.6 | 20.6 | 41 | 88 | M-low | 9.8 | 4.5 |
| 58 | Keystone 38..... | 76.4 | .3 | 19.5 | 43 | 87 | M-low | 10.2 | 4.8 |
| 58 | Trisler T-33..... | 76.4 | 1.7 | 21.5 | 62 | 88 | Low | 9.8 | 4.7 |
| 60 | Super-Crost 840A..... | 75.6 | .5 | 22.0 | 58 | 88 | M-low | 9.4 | 4.7 |
| 61 | DeKalb 817A..... | 75.5 | 2.8 | 19.3 | 44 | 89 | M-low | 10.2 | 4.8 |
| 61 | Super-Crost 708(W)..... | 75.5 | .6 | 19.9 | 40 | 84 | Medium | 9.9 | 4.0 |
| 63 | Crow 805..... | 74.6 | .5 | 20.2 | 61 | 82 | Medium | 9.8 | 4.7 |
| 64 | Doubet D-41..... | 73.8 | 1.2 | 22.7 | 67 | 84 | Medium | 10.9 | 4.8 |
| 65 | Moews 830..... | 73.7 | 1.0 | 18.2 | 66 | 93 | Low | 10.3 | 4.5 |
| 66 | Keystone 106(W)..... | 73.6 | 0 | 22.0 | 47 | 83 | Medium | 10.2 | 4.5 |
| 66 | Lowe 523..... | 73.6 | 1.3 | 20.6 | 67 | 89 | M-low | 9.7 | 4.7 |
| 68 | Stiegelmeier S-13..... | 73.4 | .9 | 21.0 | 47 | 87 | M-low | 10.4 | 4.3 |
| 69 | DeKalb 840..... | 72.9 | 3.2 | 20.0 | 39 | 88 | Low | 10.5 | 4.3 |
| 70 | Illinois 200 (Haudrich)..... | 72.4 | 1.2 | 22.3 | 53 | 84 | Medium | 10.2 | 5.0 |
| 71 | P.A.G. 347..... | 72.3 | .3 | 19.2 | 79 | 87 | Low | 10.0 | 4.6 |
| 72 | Kelly K-42..... | 72.2 | 1.5 | 18.6 | 37 | 89 | M-low | 10.1 | 4.7 |
| 73 | Crow 607..... | 71.4 | .3 | 18.7 | 77 | 81 | Low | 9.9 | 4.6 |
| 73 | Funk G-94..... | 71.4 | .5 | 21.2 | 52 | 90 | Medium | 9.5 | 4.6 |
| 73 | P.A.G. 1897..... | 71.4 | .1 | 24.3 | 57 | 93 | Low | 9.4 | 4.4 |
| 76 | Iowahealth 25A..... | 71.0 | 1.1 | 21.0 | 65 | 88 | M-low | 10.4 | 4.8 |
| 77 | Producers 945..... | 69.4 | 1.6 | 20.6 | 56 | 80 | Medium | 10.6 | 5.0 |
| 78 | Iowahealth 25..... | 68.9 | 1.4 | 20.4 | 60 | 88 | M-low | 9.8 | 4.5 |
| 79 | National 125..... | 67.7 | 0 | 21.7 | 69 | 82 | M-low | 10.0 | 4.7 |
| 80 | Doubet D-42..... | 67.1 | .7 | 21.7 | 75 | 87 | Low | 9.8 | 4.5 |
| 81 | DeKalb 680..... | 66.9 | .8 | 22.3 | 32 | 91 | Low | 9.9 | 4.5 |
| Average of all entries..... | | 81.3 | .9 | 21.3 | 60 | 88 | ..... | 10.1 | 4.7 |

^a Two-year average 1949-1950. ^b 1948 data omitted because of crop failure. ^c Average of Illinois 784 (Haudrich) 1947; Illinois 784 (Haudrich, Station) 1949; Illinois 784 (Haudrich) 1950. ^d Average of Illinois 200 (Haudrich, Burrus) 1947; Illinois 200 (Haudrich, Pfeifer, Station) 1949; Illinois 200 (Haudrich) 1950. ^e Average of U.S. 13 (Canterbury, Haudrich, Kelly, Morgan) 1947; U.S. 13 (Appl, Haudrich, Kelly, Lepper, Morgan) 1949; U.S. 13 (Lepper, Station) 1950.

Table 11. — EXTREME SOUTHERN ILLINOIS: Dixon Springs
Bottomland and Upland

| Rank | Entry | Total acre yield | Damaged corn in shelled sample | Mois- ture in grain at harvest | Erect plants | Stand | Height of ear | Protein | Oil |
|---|----------------------------------|------------------------|---|---|-----------------|--------|------------------|---------|--------|
| SUMMARY, Bottomland, 1948-1950: Less than 4.0 bushels difference between total yields of any two entries is not significant. | | | | | | | | | |
| | | bu. | perct. | perct. | perct. | perct. | | perct. | perct. |
| 1 | Illinois 1459 (Station)..... | 65.0 | 1.1 | 23.0 | 89 | .. | Medium | 10.1 | 5.0 |
| 2 | Funk G-711..... | 63.2 | 3.2 | 26.9 | 79 | .. | High | 8.9 | 5.0 |
| 3 | Illinois 2214 (W) (Station)..... | 62.8 | 2.5 | 21.1 | 82 | .. | M-high | 8.6 | 4.3 |
| 4 | Lowe 865 (W)..... | 61.4 | 1.4 | 19.6 | 79 | .. | M-low | 9.6 | 4.2 |
| 5 | Whisnand 917 (W)..... | 59.9 | 2.0 | 21.0 | 84 | .. | M-high | 9.1 | 4.3 |
| 6 | Lowe 855 (W)..... | 59.5 | 1.2 | 21.8 | 78 | .. | Medium | 9.8 | 3.9 |
| 7 | P.A.G. 620 (W)..... | 58.8 | 1.9 | 23.0 | 83 | .. | M-high | 8.9 | 4.2 |
| 8 | Doubet D-41..... | 58.4 | .8 | 20.8 | 74 | .. | M-low | 9.4 | 4.5 |
| 9 | Pioneer 302..... | 58.1 | 1.1 | 22.0 | 89 | .. | Medium | 10.0 | 4.4 |
| 10 | P.A.G. 617 (W)..... | 55.4 | 2.4 | 21.6 | 87 | .. | M-high | 9.4 | 4.3 |
| 11 | Lowe 820..... | 55.2 | 3.2 | 21.9 | 89 | .. | Medium | 9.3 | 4.9 |
| 11 | Super-Crost 708 (W)..... | 55.2 | 1.1 | 22.2 | 82 | .. | M-high | 9.6 | 4.3 |
| 13 | Bear OK-40B..... | 54.6 | 1.6 | 20.3 | 86 | .. | M-low | 9.5 | 4.7 |
| 14 | Pioneer 505 (W)..... | 54.1 | 1.6 | 21.1 | 90 | .. | M-high | 9.2 | 3.9 |
| 15 | Lowe 840..... | 53.9 | 2.3 | 21.4 | 91 | .. | M-high | 10.5 | 4.7 |
| 16 | P.A.G. 173..... | 53.6 | 2.3 | 17.5 | 81 | .. | M-low | 9.6 | 4.4 |
| 17 | Illinois 2216 (W) (Station)..... | 53.1 | 1.6 | 21.6 | 87 | .. | Medium | 9.3 | 4.3 |
| 18 | Super-Crost 1005B..... | 53.0 | 1.7 | 20.9 | 85 | .. | Medium | 10.0 | 4.9 |
| 19 | Pioneer 332..... | 52.8 | 2.8 | 20.4 | 79 | .. | Medium | 9.0 | 4.1 |
| 19 | Whisnand 905 (W)..... | 52.8 | 1.7 | 22.8 | 82 | .. | M-high | 9.0 | 4.3 |
| 21 | Funk G-145..... | 52.5 | 1.2 | 22.5 | 72 | .. | Medium | 9.6 | 4.9 |
| 22 | Ainsworth X-14A..... | 52.4 | 1.5 | 21.0 | 81 | .. | Medium | 9.4 | 4.9 |
| 23 ^a | Illinois 200..... | 51.9 | 4.5 | 21.7 | 84 | .. | Medium | 9.7 | 4.6 |
| 24 | Keystone 38..... | 50.5 | 1.6 | 18.8 | 81 | .. | M-low | 9.3 | 4.2 |
| 25 ^b | Illinois 784..... | 50.3 | 1.0 | 21.9 | 65 | .. | Medium | 10.5 | 4.8 |
| 26 | Embro 49..... | 50.0 | 1.4 | 21.5 | 76 | .. | Medium | 9.7 | 4.6 |
| 27 | Pioneer 304..... | 49.3 | 1.8 | 21.3 | 82 | .. | Low | 9.5 | 4.7 |
| | Average of all entries..... | 55.5 | 1.9 | 21.5 | 82 | .. | ..... | 9.5 | 4.5 |
| 1950 RESULTS, Bottomland: Less than 6.3 bushels difference between total yields of any two entries is not significant. | | | | | | | | | |
| 1 | Funk G-779 (W)..... | 44.3 | 5.7 | 29.5 | 76 | 95 | High | 9.3 | 5.0 |
| 2 | Pioneer 302..... | 41.1 | 1.2 | 19.7 | 94 | 94 | Medium | 9.9 | 3.8 |
| 3 | Illinois 1445A (Station)..... | 40.7 | .6 | 18.0 | 89 | 93 | Medium | 9.6 | 3.9 |
| 4 | Illinois 2214 (W) (Station)..... | 38.8 | 5.4 | 21.9 | 76 | 91 | M-high | 8.2 | 3.9 |
| 5 | Corn Belt 90A..... | 38.2 | 9.3 | 20.2 | 73 | 92 | Medium | 8.9 | 4.4 |
| 6 | Illinois 1459 (Station)..... | 37.9 | .9 | 22.6 | 93 | 90 | Medium | 9.6 | 4.8 |
| 7 | Lowe 840..... | 36.3 | 5.1 | 20.7 | 93 | 90 | Medium | 9.6 | 4.4 |
| 8 | Funk G-704..... | 35.9 | .3 | 20.0 | 86 | 89 | M-high | 8.6 | 3.7 |
| 9 | Embro 155 (W)..... | 35.5 | 2.1 | 18.2 | 85 | 87 | High | 8.9 | 3.8 |
| 10 | Bear OK-40B..... | 35.1 | 1.6 | 19.5 | 80 | 88 | M-low | 8.8 | 4.5 |
| 10 | Illinois 1521B (Station)..... | 35.1 | 1.8 | 23.1 | 91 | 78 | M-high | 9.8 | 4.7 |
| 12 | Haudrich 10 (W)..... | 33.7 | 6.3 | 20.0 | 85 | 87 | M-high | 8.4 | 3.8 |
| 13 | Super-Crost 1010S..... | 33.6 | .9 | 18.5 | 89 | 87 | Medium | 9.2 | 4.7 |
| 13 | Whisnand 917 (W)..... | 33.6 | 3.4 | 20.3 | 71 | 81 | M-high | 8.2 | 3.8 |
| 15 | Super-Crost 1005B..... | 32.8 | .7 | 16.4 | 88 | 87 | M-low | 9.8 | 4.1 |
| 16 | Funk G-98..... | 32.5 | 2.6 | 18.4 | 72 | 88 | Medium | 9.2 | 4.3 |
| 17 | Illinois 1540B (Station)..... | 32.3 | 1.8 | 19.6 | 92 | 88 | Medium | 8.6 | 4.6 |
| 18 | Producers E-409..... | 31.3 | 1.9 | 19.8 | 91 | 92 | Medium | 9.1 | 4.3 |
| 19 | Hunerkoch H-35..... | 31.2 | 1.5 | 19.0 | 57 | 90 | Medium | 9.0 | 4.0 |
| 19 | P.A.G. 620 (W)..... | 31.2 | 4.3 | 22.9 | 75 | 85 | Medium | 8.4 | 3.7 |
| 21 | Keystone 111 (W)..... | 30.9 | 4.6 | 21.6 | 89 | 87 | M-high | 9.7 | 3.5 |
| 22 | Funk G-711..... | 30.8 | 2.9 | 24.3 | 72 | 87 | Medium | 8.4 | 4.9 |
| 22 | Lowe 820..... | 30.8 | 5.7 | 23.6 | 86 | 89 | Medium | 9.1 | 4.3 |
| 22 | Hunerkoch H-91 (W)..... | 30.8 | 6.4 | 22.3 | 83 | 89 | M-high | 8.7 | 3.7 |
| 25 | S.S. 903 (W)..... | 30.3 | 5.0 | 20.3 | 75 | 85 | Medium | 9.1 | 3.8 |
| 26 | Super-Crost 708 (W)..... | 29.9 | 1.8 | 18.8 | 67 | 87 | Medium | 9.6 | 4.5 |
| 27 | Lowe 865 (W)..... | 29.0 | 2.3 | 18.2 | 64 | 88 | M-low | 10.1 | 3.9 |
| 28 | Keystone 222..... | 28.9 | 3.1 | 24.5 | 63 | 89 | M-high | 8.4 | 4.7 |

(Table is concluded on next page)

Table 11.—EXTREME SOUTHERN ILLINOIS:
Dixon Springs—concluded

| Rank | Entry | Total acre yield | Damaged corn in shelled sample | Mois- ture in grain at harvest | Erect plants | Stand | Height of ear | Protein | Oil |
|-----------------------------------|---------------------------------|------------------------|---|---|-----------------|---------------|------------------|---------------|---------------|
| 1950 Bottomland results—concluded | | | | | | | | | |
| | | <i>bu.</i> | <i>perct.</i> | <i>perct.</i> | <i>perct.</i> | <i>perct.</i> | | <i>perct.</i> | <i>perct.</i> |
| 29 | Doubet D-41..... | 28.6 | .3 | 18.1 | 61 | 81 | M-low | 9.9 | 4.2 |
| 29 | Pioneer 332..... | 28.6 | 5.8 | 17.7 | 76 | 86 | M-low | 8.9 | 3.6 |
| 31 | Producers 1050..... | 27.5 | 1.3 | 18.5 | 73 | 88 | M-low | 9.6 | 3.9 |
| 32 | Keystone 106(W)..... | 27.3 | 1.0 | 20.2 | 72 | 83 | Medium | 9.6 | 3.7 |
| 33 | P.A.G. 617(W)..... | 27.2 | 4.1 | 20.7 | 87 | 79 | Medium | 8.6 | 3.6 |
| 34 | Pioneer 505(W)..... | 26.8 | 1.9 | 19.6 | 84 | 85 | Medium | 9.3 | 3.4 |
| 35 | Bear OK-85..... | 26.7 | .9 | 18.7 | 86 | 87 | M-low | 9.0 | 4.4 |
| 36 | Pioneer 301..... | 26.5 | 1.3 | 18.2 | 87 | 90 | Low | 9.2 | 3.5 |
| 37 | Illinois 784 (Haudrich)..... | 26.4 | 1.0 | 17.6 | 71 | 88 | M-low | 9.5 | 4.2 |
| 38 | Whisnand 905(W)..... | 26.3 | 3.4 | 20.8 | 78 | 86 | Medium | 8.4 | 3.8 |
| 39 | Lowe 855(W)..... | 25.8 | 2.2 | 22.2 | 63 | 87 | M-high | 10.5 | 2.9 |
| 40 | Crow 805..... | 25.2 | 1.5 | 18.0 | 87 | 89 | M-low | 9.0 | 4.1 |
| 41 | Funk G-705..... | 25.1 | 3.0 | 24.1 | 74 | 89 | Medium | 9.8 | 4.2 |
| 42 | P.A.G. 173..... | 24.9 | 4.2 | 18.1 | 72 | 89 | M-low | 9.2 | 4.2 |
| 43 | Embro 49..... | 24.6 | 1.6 | 19.5 | 64 | 88 | M-low | 9.7 | 4.4 |
| 44 | Hunerkoch H-30..... | 24.3 | 1.7 | 18.3 | 70 | 88 | M-low | 9.4 | 4.6 |
| 45 | P.A.G. 1897..... | 23.6 | 1.3 | 16.0 | 78 | 88 | M-low | 9.5 | 3.2 |
| 46 | Whisnand 834..... | 23.5 | .6 | 18.3 | 83 | 88 | Low | 9.2 | 4.3 |
| 47 | Illinois 2216(W) (Station)..... | 23.4 | 2.4 | 18.8 | 77 | 86 | Medium | 9.2 | 3.9 |
| 48 | Pioneer 304..... | 23.2 | 2.3 | 19.4 | 82 | 92 | M-low | 9.7 | 4.0 |
| 49 | Hunerkoch H-14..... | 23.0 | 8.7 | 18.0 | 78 | 90 | M-low | 9.5 | 4.4 |
| 49 | Hunerkoch H-23..... | 23.0 | 1.5 | 17.5 | 87 | 88 | M-low | 9.4 | 3.9 |
| 49 | Keystone 45..... | 23.0 | 9.4 | 17.9 | 76 | 85 | M-low | 9.6 | 3.9 |
| 52 | Corn Belt 70A..... | 22.6 | 4.7 | 19.4 | 89 | 89 | M-low | 9.6 | 4.3 |
| 52 | Haudrich 13..... | 22.6 | 15.5 | 18.4 | 80 | 90 | Low | 9.2 | 4.3 |
| 54 | Illinois 200 (Haudrich)..... | 21.9 | 9.0 | 22.6 | 88 | 86 | M-low | 9.6 | 4.0 |
| 55 | Doubet D-42..... | 21.2 | .5 | 16.6 | 91 | 85 | Low | 9.5 | 4.1 |
| 55 | P.A.G. 164..... | 21.2 | 2.3 | 18.9 | 85 | 85 | Low | 9.1 | 3.9 |
| 57 | National 129-2..... | 20.6 | 2.9 | 19.8 | 80 | 85 | Medium | 10.6 | 4.5 |
| 58 | Ainsworth X-14A..... | 20.4 | .4 | 19.5 | 78 | 87 | M-low | 9.8 | 4.8 |
| 58 | Keystone 38..... | 20.4 | 2.8 | 18.1 | 79 | 84 | M-low | 8.5 | 3.7 |
| 60 | Funk G-145..... | 19.6 | 1.1 | 19.1 | 74 | 77 | M-low | 9.5 | 4.1 |
| | Average of all entries..... | 28.8 | 3.2 | 19.8 | 79 | 87 | ..... | 9.3 | 4.1 |

SUMMARY, Upland, 1948-1950: Less than 5.7 bushels difference between total yields of any two entries is not significant.

| | | | | | | | | | |
|---|---------------------------------|------|-----|------|----|----|--------|------|-----|
| 1 | Lowe 855(W)..... | 67.0 | 3.5 | 20.0 | 85 | .. | Medium | 10.2 | 4.2 |
| 2 | Funk G-711..... | 66.2 | 3.7 | 24.5 | 73 | .. | M-high | 10.4 | 5.2 |
| 3 | Keystone 106(W)..... | 65.6 | 2.7 | 19.6 | 88 | .. | Medium | 10.1 | 4.3 |
| 4 | Illinois 2216(W) (Station)..... | 64.6 | 8.5 | 21.7 | 89 | .. | M-high | 9.7 | 4.3 |
| 5 | Illinois 2214(W) (Station)..... | 63.9 | 2.8 | 21.9 | 85 | .. | M-high | 9.8 | 4.3 |
| | Average of all entries..... | 65.5 | 4.2 | 21.5 | 84 | .. | ..... | 10.0 | 4.5 |

1950 RESULTS, Upland: Less than 10.3 bushels difference between total yields of any two entries is not significant.

| | | | | | | | | | |
|----|---------------------------------|------|------|------|----|----|--------|------|-----|
| 1 | Illinois 1459 (Station)..... | 88.1 | 2.6 | 18.8 | 88 | 85 | High | 12.4 | 6.1 |
| 2 | Whisnand 917(W)..... | 80.5 | 7.5 | 19.1 | 91 | 74 | M-high | 10.6 | 4.3 |
| 3 | Funk G-711..... | 80.2 | 3.1 | 20.7 | 65 | 68 | M-high | 10.9 | 5.4 |
| 4 | Lowe 855(W)..... | 79.6 | 7.6 | 18.3 | 79 | 73 | M-high | 11.1 | 3.6 |
| 5 | Illinois 2216(W) (Station)..... | 76.8 | 19.3 | 18.9 | 79 | 78 | M-low | 10.1 | 4.2 |
| 6 | Illinois 2214(W) (Station)..... | 74.4 | 6.1 | 18.7 | 82 | 62 | M-high | 9.8 | 4.1 |
| 7 | Keystone 106(W)..... | 66.1 | 6.0 | 19.2 | 86 | 70 | Medium | 10.1 | 4.1 |
| 8 | Hunerkoch 23..... | 64.7 | 3.8 | 16.8 | 78 | 75 | Medium | 11.0 | 4.4 |
| 9 | Doubet D-41..... | 63.0 | 2.8 | 18.9 | 83 | 69 | Medium | 11.4 | 4.6 |
| 10 | U. S. 13 (Station)..... | 62.8 | 3.6 | 16.8 | 66 | 75 | M-low | 10.5 | 4.5 |
| 11 | Illinois 200 (Station)..... | 58.6 | 17.3 | 18.4 | 78 | 58 | M-low | 10.1 | 4.8 |
| | Average of all entries..... | 72.3 | 7.2 | 18.6 | 80 | 72 | ..... | 10.7 | 4.6 |

^a This entry was average of Illinois 200 (Haudrich and Station) in 1948 and 1949.

^b This entry was average of Illinois 784 (Haudrich and Station) in 1948 and 1949 and Haudrich in 1950.

SOIL ADAPTATION TEST

For the past five years six single-cross and three double-cross hybrids have been tested at Urbana for their adaptation to soils differing in fertility level. In 1950 the seed of one single cross was of such poor quality that its performance was omitted. The five-year average and the 1950 yields are given in Table 12.

Soils. The two areas used for the tests are on the Agronomy south farm and differ in productivity as a result of long-continued use of different cropping systems. In the Southwest rotation a high state of productivity has been maintained by a systematic rotation of corn, oats, clover hay, and wheat with a red-clover catch crop. The South-Central area has been depleted of fertility by a rotation of corn, corn, corn, and soybeans. Both fields have received manure and phosphate. The predominating soil type on both fields is Sidell silt loam.

Season. The 1950 growing season at Urbana was only fair. Planting and harvesting were carried out at the normal times. Rainfall was well distributed, but temperatures were below normal during July and August and not favorable for the highest production. The corn-growing seasons of 1946, 1948, and 1949 were very favorable. The 1947 season was not favorable for maximum production.

1950 results. The average yield of all the hybrids tested in 1950 was slightly below the average of the preceding four years. It was much higher than the low year of 1947. The three single-cross hybrids Hy \times L317, Hy \times Oh7, and WF9 \times Hy and two double crosses, Illinois 972-1 and Illinois 246, maintained their top rank in yields on both fertility levels, as in previous years. As in the past, early-maturing hybrids were low-yielding. This points to the desirability of growing full-season adapted hybrids.

Five-year averages. The rank of the hybrids in the five-year summary does not differ significantly from their rank in each of the five years. The single crosses Hy \times L317 and Hy \times Oh7 and the double crosses 972-1 and 246 stand at the top on both levels of fertility.

Table 12. — SOIL ADAPTATION TEST: Central Illinois, Urbana

| Rank | Entry | Total acre yield | Erect plants | Rating for— | |
|--|---------------------|------------------------|-----------------|-----------------|----------------|
| | | | | Erect plants | Total yield |
| Highly productive soil ^a 1946-1950 (rotation: corn, oats, clover, wheat and red clover): Less than 2.9 bushels difference between total yields of any two entries is not significant. | | | | | |
| | | <i>bu.</i> | <i>perct.</i> | <i>perct.</i> | <i>perct.</i> |
| 1 | Hy × L317..... | 124.0 | 74 | 95 | 108 |
| 2 | Hy × Oh7..... | 121.8 | 86 | 110 | 106 |
| 3 | Illinois 972-1..... | 119.5 | 78 | 100 | 104 |
| 4 | Illinois 246..... | 119.1 | 69 | 88 | 104 |
| 5 | WF9 × Hy..... | 116.7 | 84 | 108 | 102 |
| 6 | WF9 × 38-11..... | 112.3 | 86 | 110 | 98 |
| 7 | Illinois 751..... | 105.9 | 75 | 96 | 93 |
| 8 | 5120 × Hy..... | 96.0 | 73 | 94 | 84 |
| | Average..... | 114.4 | 78 | | |

Medium productive soil^b 1946-1950 (rotation: corn, corn, corn, soybeans): Less than 2.9 bushels difference between total yields of any two entries is not significant.

| | | | | | |
|---|---------------------|------|----|-----|-----|
| 1 | Hy × Oh7..... | 69.9 | 89 | 109 | 115 |
| 2 | Illinois 972-1..... | 65.1 | 84 | 102 | 107 |
| 3 | Hy × L317..... | 64.8 | 75 | 91 | 106 |
| 4 | WF9 × Hy..... | 64.0 | 89 | 109 | 105 |
| 5 | Illinois 246..... | 64.0 | 74 | 90 | 105 |
| 6 | Illinois 751..... | 58.6 | 81 | 99 | 96 |
| 7 | WF9 × 38-11..... | 55.5 | 81 | 99 | 91 |
| 8 | 5120 × Hy..... | 44.9 | 81 | 99 | 74 |
| | Average..... | 60.9 | 82 | ... | ... |

Highly productive soil^a 1950 (rotation: corn, oats, clover, wheat and red clover): Less than 10.4 bushels difference between total yields of any two entries is not significant.

| | | | | | |
|---|---------------------|-------|----|-----|-----|
| 1 | Hy × Oh7..... | 119.5 | 87 | 158 | 108 |
| 2 | Illinois 972-1..... | 118.1 | 52 | 95 | 106 |
| 3 | Hy × L317..... | 116.0 | 53 | 96 | 105 |
| 4 | Illinois 246..... | 110.3 | 40 | 73 | 99 |
| 5 | WF9 × 38-11..... | 109.8 | 60 | 109 | 99 |
| 6 | WF9 × Hy..... | 108.7 | 54 | 98 | 98 |
| 7 | 5120 × Hy..... | 103.7 | 37 | 67 | 93 |
| 8 | Illinois 751..... | 102.1 | 56 | 102 | 92 |
| | Average..... | 111.0 | 55 | ... | ... |

Medium productive soil^b 1950 (rotation: corn, corn, corn, soybeans): Less than 12.1 bushels difference between total yields of any two entries is not significant.

| | | | | | |
|---|---------------------|------|----|-----|-----|
| 1 | Hy × Oh7..... | 61.8 | 77 | 118 | 113 |
| 2 | Illinois 972-1..... | 60.9 | 78 | 120 | 112 |
| 3 | WF9 × Hy..... | 58.2 | 69 | 106 | 107 |
| 4 | Hy × L317..... | 57.8 | 57 | 88 | 106 |
| 5 | Illinois 246..... | 55.9 | 62 | 95 | 103 |
| 6 | Illinois 751..... | 52.7 | 59 | 91 | 97 |
| 7 | WF9 × 38-11..... | 52.2 | 51 | 78 | 96 |
| 8 | 5120 × Hy..... | 36.5 | 67 | 103 | 67 |
| | Average..... | 54.5 | 65 | ... | ... |

^a Highly productive soil: mostly Sidell silt loam, slightly rolling phase; 1946-1950 (Southwest rotation); 1950 (S300, Southwest rotation). ^b Medium productive soil: mostly Sidell silt loam, slightly rolling phase; 1946-1950 (South-Central rotation); 1950 (S500, South-Central rotation).

SUMMARY

In 1950 three hundred and eleven hybrids were grown on eight fields in Illinois. For the fifth year five single-cross and three double-cross hybrids were grown at Urbana on two fields differing in productivity. All fields were planted in the period May 20 to May 26. Growing conditions were impaired somewhat at all locations by low summer temperatures. The DeKalb field suffered severe frost damage in the fall and the Dixon Springs bottomland field was flooded shortly after the plants came up. Results of the tests were briefly as follows:

1950 yields. The Galesburg field in west north-central Illinois had the highest yield, 92.8 bushels an acre. Average yields per acre on the other test fields were: Sheldon 89.7, Sullivan 85.9, Brownstown 81.3, Mundelein 73.9, Dixon Springs upland 72.3, DeKalb 37.0, and Dixon Springs bottomland 28.8.

The average yield of all hybrids tested was 71.8 bushels. This is 20 bushels or 38 percent above the average yield per acre for the state in 1950. The average yield at five locations in central and northern Illinois was 75.9 bushels which is 5 percent less than the yields from tests conducted on the same farms in 1949.

Three-year summaries, 1948-1950. The highest-yielding hybrids in the three-year summaries are as follows: **Northern Illinois** — P.A.G. 253, Sieben S-340, Illinois 751, Pioneer 349, P.A.G. 299; **West North-Central** — Schwenk S-24, Pioneer 313B, Illinois 21, P.A.G. 170, Ainsworth X-21; **East North-Central** — Illinois 21, P.A.G. 164, U.S. 13, Crow 608, P.A.G. 392; **South-Central** — Bear OK-72, Keystone 45, P.A.G. 392, Ainsworth X-13-3, U.S. 13; **Southern** — Illinois 2214(W), Illinois 1459, Pioneer 302, Funk G-80, Illinois 784; **Extreme Southern, bottomland** — Illinois 1459, Funk G-711, Illinois 2214(W), Lowe 865(W), Whisnand 917(W); **Extreme Southern, upland** — Lowe 855(W), Funk G-711, Keystone 106(W).

Certain hybrids which were top performers in the 1947 three-year summaries do not appear in the present summary tables. These hybrids are listed in Bulletin 531 (1948 report) as *Proven Hybrids*.

Lodging. Lodging was extensive in only two fields in 1950. Wind storms occurring in early September caused root lodging at Sullivan and Brownstown. Stalk breakage because of corn borers and stalk rots was of minor importance in the 1950 tests.

Corn borer damage. The European corn borer caused much less damage to the 1950 corn crop than was anticipated at the beginning of the season. The most important reason for this reduction was unfavorable weather. Other contributing factors were more intensive sanitation practices, greater conformity to planting date recommendations, and increased efforts at control with insecticides.

Disease damage. Many farmers' fields were seriously injured by disease and, on the whole, the stalk rots were the worst offenders. Helminthosporium blight, ordinarily of minor importance in Illinois, in 1950 was the worst on record.

Stewart's disease also was of considerable importance in the southern two-thirds of the state and, with Helminthosporium, predisposed plants to Diplodia and Gibberella stalk rot. Much lodging resulted from rotted stalks, especially those infected by Gibberella. Rust, also ordinarily of very minor importance in field corn, was the worst on record and caused appreciable damage. Ear rot damage was the highest since 1944, and the notable thing was that Gibberella ear rot was exceptionally high, ranking next to Diplodia in importance in the state as a whole, and was the most important ear rot on the upland field at Dixon Springs.

Protein and oil content. For the third year a sample of each entry from each field was analyzed for protein and oil. On a moisture-free basis, the average protein content for all entries was 9.9, and the average oil content was 4.4. Three-year summaries indicate that commercial hybrids grown at the same location differ as much as 1.5 percent in protein. These differences did not vary with the seasons; a high protein variety analyzed high every year for protein while a low protein variety was consistently low. This was also generally found true between varieties differing in oil content.

As in former years, there was no correlation between total yield and protein content nor between total yield and oil content.

Effect of soil-productivity level. For the fifth year six single- and three double-cross hybrids were tested at Urbana on two fields differing in productivity.¹ In 1950 the difference between the highest-yielding hybrid on the most-productive soil and lowest-yielding hybrid on the less-productive soil was 83 bushels or 2.2 times the yield of the low hybrid.

¹ Because the quality of the seed of one hybrid tested was poor, results for it are not given.

The first field, with a long-time rotation of corn, oats, red clover, and wheat (with a clover catch crop), produced an average of 114.4 bushels an acre over the five-year period. On the second field, where a rotation of corn, corn, corn, and soybeans is used, an average yield of 60.9 bushels an acre was obtained. Both fields have received the same soil treatment. The more desirable long-time rotation increased the yield 53.5 bushels.

PEDIGREES OF 29 HYBRIDS

Following is a list of open-pedigree hybrids whose performance is shown in this bulletin.

| | |
|---|---|
| Ill. 21. (Hy2×187-2)(WF9×38-11) | Ill. 1337. (Hy2×R61)(WF9×38-11) |
| Ill. 101. (M14×WF9)(187-2×W26) | Ill. 1421. (Hy2×WF9)(P8×Oh7) |
| Ill. 200. (WF9×38-11)(L317×K4) | Ill. 1445A. (38-11×K4)(CI.7×CI.21E) |
| Ill. 246. (Hy2×WF9)(L317×187-2) | Ill. 1459. (38-11×K4)(K201×CI.21E) |
| Ill. 751. (A×90)(Hy2×WF9) | Ill. 1493. (WF9×I.205)(Oh28×W22) |
| Ill. 784. (Hy2×5120)(L317×K4) | Ill. 1521B. (38-11×CI.21E)(K201×TS) |
| Ill. 972-1. (Hy2×WF9)(L317×Oh7) | Ill. 1540. (38-11×CI.21E)(K155×K201) |
| Ill. 1091. (Hy2×WF9)(M14×187-2) | Ill. 1540B. (38-11×K155)(K201×CI.21E) |
| Ill. 1091A. (Hy2×187-2)(M14×WF9) | Ill. 1558. (M14×WF9)(I.205×Oh28) |
| Ill. 1180. (M14×WF9)(WS×W32) | Ill. 1570. (Hy2×Oh41)(WF9×38-11) |
| Ill. 1246. (R61×187-2)(WF9×38-11) | Ill. 1656. (C103×Hy2)(WF9×38-11) |
| Ill. 1277. (M14×WF9)(I.205×187-2) | Ill. 2214(W).. (R30×Ky27)(H21×K64) |
| Ill. 1279. (M14×WF9)(A375×187-2) | Ill. 2216(W).. (H21×CI.61)(K64×Ky27) |
| Ill. 1280. (M14×WF9)(Os420×187-2) | U. S. 13. (Hy×L317)(WF9×38-11) |
| Ill. 1289. (M14×W22)(WF9×I.205) | |

CONTRIBUTORS OF SEED

| | | |
|---------------------------|---|-------------------------------------|
| Ainsworth Hybrids..... | Ainsworth Seed Co..... | Mason City |
| Appl Hybrids..... | Appl's Hybrid Seed Co..... | St. Joseph |
| Bear Hybrids..... | Bear Hybrid Corn Co..... | Decatur, Box 628 |
| Bo-Jac Hybrids..... | Bo-Jac Hybrids..... | Mt. Pulaski |
| Canterbury Hybrids..... | C. E. Canterbury Seed Co..... | Cantrall |
| Cargill Hybrids..... | Cargill, Inc..... | St. Peter, Minn. |
| Corn Belt Hybrids..... | Corn Belt Hybrid Seed Co., Inc..... | Boswell, Ind. |
| Crow Hybrids..... | Crow's Hybrid Corn Co..... | Milford |
| DeKalb Hybrids..... | DeKalb Agricultural Assn..... | DeKalb |
| Doubet Hybrids..... | E. W. Doubet..... | Hanna City |
| Embro Hybrids..... | Ed. F. Manglesdorf & Bro., Inc..... | 1020 S. 4th St., St. Louis, Mo. |
| Farmercraft Hybrids..... | Farmercraft Seed Co..... | Oxford, Ind. |
| Ferris Hybrids..... | Ferris Hybrids..... | Princeton |
| Frey Hybrids..... | Frey Hybrid Corn Co..... | Gilman |
| Funk Hybrids..... | Funk Brothers Seed Co..... | Bloomington |
| Furr Hybrids..... | Furr Hybrids..... | Genoa |
| Haudrich Hybrids..... | Haudrich Hybrid Corn Co..... | Belleville |
| Holmes Hybrids..... | Holmes Hybrids..... | Edelstein |
| Huebsch Hybrids..... | L. A. Huebsch & Son..... | Mundelein |
| Huey Hybrids..... | Huey Seed Co..... | Carthage |
| Hunerkoch Hybrids..... | Hunerkoch Seed Co..... | Metropolis |
| Illinois Hybrids..... | Ill. 21 (Powers Seed House, Brocton; Ill. Agr. Exp. Sta.) | |
| | Ill. 101 (L. A. Huebsch & Son; Ill. Agr. Exp. Sta.) | |
| | Ill. 200 (Haudrich Hybrid Corn Co.; Ill. Agr. Exp. Sta.) | |
| | Ill. 751 (Joslin Bros. Seed Co.) | |
| | Ill. 784 (Haudrich Hybrid Corn Co.) | |
| | Ill. 1091 (Mountjoy Hybrid Seed Co.) | |
| | Ill. 1091A (Ill. Agr. Exp. Sta.) | |
| | Ill. 1180 (L. A. Huebsch & Son) | |
| | Ill. 1246 (Geo. Holder, Bloomington, Box 801; Ill. Agr. Exp. Sta.) | |
| | Ill. 1277, 1279, 1280, 1289 (Ill. Agr. Exp. Sta.) | |
| | Ill. 1337 (Dittmer Seeds, Carthage; P. A. Stone & Son, Pleasant Plains) | |
| | Ill. 1421, 1445A, 1459, 1493, 1521B, 1540, 1540B, 1558, 1570, 1656, 2214(W), 2216(W) (Ill. Agr. Exp. Sta.) | |
| Iowearth Hybrids..... | The Iowearth Co..... | Lexington |
| Joslin Hybrids..... | Joslin Bros. Seed Co..... | Erie |
| Kelly Hybrids..... | Kelly Seed Co..... | San Jose |
| Keystone Hybrids..... | Corneli Seed Co..... | 101 Chateau Ave., St. Louis, Mo. |
| Lowe Hybrids..... | Lowe Seed Co..... | Aroma Park |
| Moews Hybrids..... | Moews Seed Co..... | Granville |
| Morton Hybrids..... | Roy A. Morton & Sons..... | Bowen |
| Munson Hybrids..... | Carl Munson..... | Galesburg |
| National Hybrids..... | National Hybrid Corn Co..... | Normal |
| Nichols Hybrids..... | Nichols Bros..... | Hebron |
| P.A.G. Hybrids..... | Pfister Assoc. Growers Inc..... | Aurora |
| Pfister 187 Hybrids..... | Lester Pfister..... | El Paso |
| Pioneer Hybrids..... | Pioneer Hi-Bred Corn Co. of Ill..... | Princeton |
| Plymouth Hybrids..... | Howard E. Huey & Son..... | Camp Point |
| Pocklington Hybrids..... | Pocklington Bros..... | Nilwood |
| Producers Hybrids..... | Producers' Seed Co..... | Piper City |
| Schwenk Hybrids..... | W. T. Schwenk & Sons..... | Edwards |
| Sieben Hybrids..... | Sieben Hybrids..... | Geneseo, R. 1 |
| S.S. Hybrids..... | Coop. Seed & Farm Supply Service Inc..... | Muncie |
| Stewart Hybrids..... | Frank S. Stewart..... | Princeville |
| Stiegelmeier Hybrids..... | H. L. Stiegelmeier..... | Normal |
| Super-Crost Hybrids..... | E. J. Funk & Sons..... | Kentland, Ind. |
| Tiemann Hybrids..... | Tiemann Seed Co..... | Bloomington |

| Hybrid | Table |
|--------------------|--------------------|
| Funk G-134..... | 10 |
| Funk G-145..... | 10, 11B, 11B |
| Funk G-169..... | 7, 8, 9 |
| Funk G-512(W)..... | 10 |
| Funk G-704..... | 11B |
| Funk G-705..... | 11B |
| Funk G-711..... | 11B, 11B, 11U, 11U |
| Funk G-779(W)..... | 11B |
| Funk G-70045A..... | 6 |
| Furr 67A..... | 5, 6 |
| Furr 70..... | 5 |

H

| | |
|------------------------|----------|
| Haudrich 10(W)..... | 10, 11B |
| Haudrich 13..... | 10, 11B |
| Holmes 11..... | 6, 6 |
| Holmes 11A..... | 6 |
| Holmes 13..... | 8 |
| Holmes 19A..... | 7 |
| Holmes 39..... | 7, 8 |
| Huebsch 24A..... | 5 |
| Huebsch 44..... | 5, 5 |
| Huebsch 81..... | 5 |
| Huey H-23..... | 7, 8 |
| Huey H-42..... | 7 |
| Hunerkoch H-14..... | 11B |
| Hunerkoch H-23..... | 11B, 11U |
| Hunerkoch H-30..... | 11B |
| Hunerkoch H-35..... | 11B |
| Hunerkoch H-91(W)..... | 11B |

I

| | |
|---------------------------------|----------------------------|
| Illinois 21 (Powers)..... | 9, 9 |
| Illinois 21 (Station)..... | 7, 7, 8, 8 |
| Illinois 101 (Huebsch)..... | 5, 5 |
| Illinois 101 (Station)..... | 6, 6 |
| Illinois 200..... | 11U |
| Illinois 200 (Haudrich)..... | 10, 10, 11B, 11B |
| Illinois 246..... | 12 |
| Illinois 751 (Joslin)..... | 6, 6 |
| Illinois 751..... | 12 |
| Illinois 784 (Haudrich)..... | 10, 10, 11B, 11B |
| Illinois 972-1..... | 12 |
| Illinois 1091 (Mountjoy)..... | 7 |
| Illinois 1091A (Station)..... | 6, 6 |
| Illinois 1180 (Huebsch)..... | 5, 5 |
| Illinois 1246 (Mountjoy)..... | 9 |
| Illinois 1246 (Station)..... | 8 |
| Illinois 1277 (Station)..... | 5, 6, 7 |
| Illinois 1279 (Station)..... | 5, 6 |
| Illinois 1280 (Station)..... | 5 |
| Illinois 1289 (Station)..... | 7 |
| Illinois 1337 (Dittmer)..... | 7 |
| Illinois 1337 (Stone)..... | 9 |
| Illinois 1421 (Station)..... | 8 |
| Illinois 1445A (Station)..... | 9, 10, 11B |
| Illinois 1459 (Station)..... | 10, 10, 11B, 11B, 11U |
| Illinois 1493 (Station)..... | 5, 6 |
| Illinois 1521B (Station)..... | 11B |
| Illinois 1540 (Station)..... | 9, 10 |
| Illinois 1540B (Station)..... | 11B |
| Illinois 1558 (Station)..... | 6, 7, 8 |
| Illinois 1570 (Station)..... | 7, 8, 9, 10 |
| Illinois 1656 (Station)..... | 9 |
| Illinois 2214(W) (Station)..... | 10, 10, 11B, 11B, 11U, 11U |
| Illinois 2216(W) (Station)..... | 9, 9, 11B, 11B, 11U, 11U |
| Iowa 4A..... | 7, 7 |
| Iowa 4A..... | 5 |
| Iowa 16A..... | 6 |
| Iowa 25..... | 10 |
| Iowa 25A..... | 10 |

J

| | |
|-------------------|---|
| Joslin J-102..... | 6 |
|-------------------|---|

| Hybrid | Table |
|----------------------|------------------------|
| Kelly K-42..... | 7, 10 |
| Kelly K-44..... | 9, 9 |
| Kelly K-77..... | 8, 8, 9 |
| Kelly K-88..... | 9, 9 |
| Kelly K-374..... | 7, 8 |
| Keystone 32..... | 5, 6, 7 |
| Keystone 33..... | 6, 6 |
| Keystone 38..... | 7, 9, 10, 10, 11B, 11B |
| Keystone 45..... | 9, 9, 10, 10, 11B |
| Keystone 106(W)..... | 10, 10, 11B, 11U, 11U |
| Keystone 111(W)..... | 10, 11B |
| Keystone 222..... | 11B |

L

| | |
|------------------|----------------------------|
| Lowe 22..... | 6 |
| Lowe 24..... | 7 |
| Lowe 32..... | 5, 6, 6 |
| Lowe 38..... | 5, 6 |
| Lowe 52..... | 5, 6, 6 |
| Lowe 514..... | 7, 7, 8, 8, 9, 9 |
| Lowe 520..... | 7, 7, 8, 8, 9 |
| Lowe 523..... | 8, 8, 9, 9, 10, 10 |
| Lowe 640..... | 8, 10 |
| Lowe 820..... | 10, 10, 11B, 11B |
| Lowe 830..... | 10, 10 |
| Lowe 840..... | 11B, 11B |
| Lowe 855(W)..... | 10, 10, 11B, 11B, 11U, 11U |
| Lowe 865(W)..... | 10, 11B, 11B |

M

| | |
|--------------------|---------------|
| Moews 14..... | 6, 6, 7, 8 |
| Moews 14E..... | 5 |
| Moews 14L..... | 7 |
| Moews 15..... | 6 |
| Moews 87..... | 5, 5 |
| Moews 520..... | 7, 8, 8 |
| Moews 523..... | 9, 10 |
| Moews 550..... | 7, 8 |
| Moews 830..... | 10 |
| Morton M-12..... | 7, 7, 8, 8, 9 |
| Morton M-30..... | 7, 8, 9 |
| Munson M-H..... | 7 |
| Munson M-5..... | 6 |
| Munson M-13..... | 7 |
| Munson M-19-1..... | 7 |

N

| | |
|---------------------|--------------|
| National 112..... | 5 |
| National 114-1..... | 6, 6 |
| National 115A..... | 7, 8 |
| National 118..... | 8 |
| National 123..... | 9, 9, 10, 10 |
| National 125-1..... | 7, 7, 9, 9 |
| National 126T..... | 9 |
| National 129..... | 10, 10 |
| National 129-2..... | 11B |
| Nichols 5A..... | 6 |
| Nichols 5B..... | 5, 5, 6 |
| Nichols 51..... | 5 |
| Nichols 75..... | 5, 5, 6, 6 |
| Nichols 99..... | 5, 5, 6 |
| Nichols 202A..... | 5, 5 |

P

| | |
|-----------------|------------------------|
| P.A.G. 56..... | 5, 5 |
| P.A.G. 61..... | 5, 5 |
| P.A.G. 164..... | 8, 8, 9, 10, 11B |
| P.A.G. 170..... | 7, 7, 8, 9, 9 |
| P.A.G. 173..... | 9, 9, 10, 10, 11B, 11B |
| P.A.G. 253..... | 6, 6 |
| P.A.G. 270..... | 6, 7 |
| P.A.G. 299..... | 6, 6 |
| P.A.G. 347..... | 7, 8, 9, 10 |

| Hybrid | Table |
|-------------------------|------------------------|
| P. A. G. 392 | 7, 7, 8, 8, 9, 9 |
| P. A. G. 617 (W) | 10, 10, 11B, 11B |
| P. A. G. 620 (W) | 10, 11B, 11B |
| P. A. G. 631 (W) | 10 |
| P. A. G. 1897 | 10, 11B |
| P. A. G. 2675 | 6 |
| P. A. G. 4506 | 7 |
| P. A. G. 4897 | 5, 6, 8 |
| Pfister 187 Hybrid 380 | 8 |
| Pfister 187 Hybrid 456 | 7, 8, 9 |
| Pfister 187 Hybrid 789 | 8 |
| Pfister 187 Hybrid 1897 | 7, 8 |
| Pioneer 300 | 8, 9, 10, 10 |
| Pioneer 301 | 7, 9, 10, 11B |
| Pioneer 302 | 9, 10, 10, 11B, 11B |
| Pioneer 304 | 7, 8, 11B, 11B |
| Pioneer 313B | 7, 7, 8, 9 |
| Pioneer 332 | 8, 9, 10, 10, 11B, 11B |
| Pioneer 335 | 8 |
| Pioneer 336 | 7, 7 |
| Pioneer 339 | 7 |
| Pioneer 346 | 5, 6 |
| Pioneer 347 | 5, 6 |
| Pioneer 349 | 5, 5, 6, 6 |
| Pioneer 350 | 6 |
| Pioneer 352 | 5, 5, 6 |
| Pioneer 377A | 5, 5 |
| Pioneer 505 (W) | 10, 10, 11B, 11B |
| Pioneer 510 (W) | 10 |
| Plymouth 11 | 7 |
| Plymouth 38 | 7 |
| Pocklington P-60 | 9 |
| Pocklington P-78 | 9 |
| Producers 305 | 5, 5 |
| Producers 311 | 5, 5, 6 |
| Producers 315 | 5, 5 |
| Producers 320 | 5, 5 |
| Producers E360 | 6, 7 |
| Producers E409 | 10, 11B |
| Producers 510 | 6 |
| Producers 730 | 7, 8 |
| Producers 900 | 7, 7, 8, 8, 9, 9 |
| Producers 940 | 7, 7, 8, 8, 9 |
| Producers 945 | 9, 10 |
| Producers 1050 | 9, 10, 11B |

S

| | |
|---------------|------------|
| Schwenk S-24 | 7, 7 |
| Schwenk S-34 | 7, 8 |
| Sieben S-340 | 6, 6, 7, 7 |
| Sieben S-440 | 7, 7 |
| Sieben S-440E | 6, 6, 7 |
| Sieben S-450 | 6 |

| Hybrid | Table |
|---------------------|---------------------|
| Sieben S-560 | 6 |
| S. S. 903 (W) | 10, 11B |
| Stewart S-130 | 7 |
| Ztiegelmeier S-9H | 5 |
| Ztiegelmeier S-13 | 10 |
| Ztiegelmeier S-340 | 7, 8, 9 |
| Ztiegelmeier S-360 | 6 |
| Ztiegelmeier S-370 | 7, 8, 9 |
| Ztiegelmeier S-379 | 7 |
| Super-Crost FD-3B | 6 |
| Super-Crost FD-6 | 8, 8 |
| Super-Crost S-12 | 8, 8 |
| Super-Crost S-5A | 5, 5 |
| Super-Crost F-112A | 5 |
| Super-Crost 213 | 5, 5, 6 |
| Super-Crost 708 (W) | 9, 10, 10, 11B, 11B |
| Super-Crost 746 | 8 |
| Super-Crost 840A | 8, 9, 10 |
| Super-Crost 1005B | 10, 11B, 11B |
| Super-Crost 1010S | 11B |

T

| | |
|---------------|-------|
| Tiemann 61 | 6 |
| Tiemann 78 | 10 |
| Tiemann 93 | 10 |
| Trisler T-19 | 8, 9 |
| Trisler T-19A | 8 |
| Trisler T-32 | 9 |
| Trisler T-33 | 9, 10 |
| Trisler T-33A | 8 |

U

| | |
|--------------------|-------------------------------|
| United U-32A | 5, 6 |
| U. S. 13 (Lepper) | 10 |
| U. S. 13 (Station) | 7, 7, 8, 8, 9, 9, 10, 10, 11U |

W

| | |
|------------------|-------------------|
| Whisnand 804 | 9, 9 |
| Whisnand 804D | 9 |
| Whisnand 831 | 9, 10 |
| Whisnand 834 | 10, 11B |
| Whisnand 905 (W) | 11B, 11B |
| Whisnand 917 (W) | 10, 11B, 11B, 11U |

Single Crosses

| | |
|-------------|----|
| Hy × L317 | 12 |
| Hy × Oh7 | 12 |
| WF9 × Hy | 12 |
| WF9 × 38-11 | 12 |
| 5120 × Hy | 12 |

First printing — subject to correction